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ORIGINAL ARTICLES.

NEPHROLITHOTOMY.¹

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I was asked, in February of this year, by Dr. Frank Donaldson, Jr., of Baltimore, to see with him a patient in the pelvis of whose right kidney Dr. Donaldson had diagnosed trouble, for the relief of which surgical treatment was judged necessary. The patient was a male, aged twenty-six years, married, the father of one child, pale, emaciated, and gave the following history: at the age of seventeen years he began to experience pain in the right loin, paroxysmal in character and not very intense. The attacks of pain gradually increased in severity and at shorter intervals; he was, however, able to finish his apprenticeship, that of tinner. About six years ago he noticed that his urine was lightish in color and deposited a white sediment, as he expressed it. At that time exercise did not bring on an attack of suffering, neither did he observe blood in his urine. On July 4, 1884, he was seized with an attack of pain extremely severe on the right side just below the ribs, pain has continued almost constantly ever since, remissions being rare; during the night pain has been more severe than during the day. Since last July, the patient under consideration has taken much morphine—without it, he says he could not live.

Physical examination showed tenderness on percussion and on pressure acute pain, over the front of the belly about the region of the kidney; no tumor was detected, although searched for.

The outer portion of the right external oblique was rigid, and the lumbar muscles were more rigid than natural; percussion gave a sound somewhat more dull than over the corresponding region of the left side. The patient moves slowly, holding the trunk stiffly, for quick motion and any exertion cause much pain.

Urine was passed in normal amount, and contained much pus; casts were not observed, although searched for; there was no history of blood or gravel having been passed at any time. Micturition not unduly frequent or painful and in full stream.

These symptoms justified exploration of the kidney, so on February 21st, H. J., being anesthetized with ether, I exposed the kidney by an incision carried half an inch below and parallel to the last rib. The quadratus lumborum muscle was divided, as also the outer edge of the erector spine. The perirenal and subperitoneal fat being divided, the kidney was watched and seen to rise and fall regularly with respiration, thus excluding perirenal inflammation to

any marked degree. To the touch the gland seemed more hard than normal and a needle passed into the kidney did not touch stone; on passing the needle again in, it was directed more forwards than the first time; I at once struck a stone. The kidney was then freely opened lengthwise with the hot blade of Paquelin's cautery and the finger passed in to explore. The kidney pelvis was filled by stone so closely that without undue force I was not able to pass any forceps so as to grasp the calculus. In attempting so to do, I broke off a piece of stone and saw that I had to do with a phosphatic concretion.

I then directed an assistant to press with the flat of his hand upon the patient's belly so as to force the kidney towards my incision, while with a Volkmann's sharp spoon and forceps I broke up and removed the stone. The spoon acted charmingly, cutting a hole in the centre of the mass with rapidity. The debris was washed away by means of a syringe. The fragments which were collected weighed 556 grains, phosphate of lime. Hemorrhage was insignificant and ceased under hot water irrigation. A large drainage-tube was passed into the pelvis of the kidney and an oakum and iodoform dressing applied. At the (12 M.) conclusion of the operation the pulse was 156, respiration 18, temperature 101.4°; at 11 P.M., the pulse 132, temperature 101°, respiration 18. Forty minutes after the operation the patient passed water and complained of its burning him.

Convalescence calls for no special comment. All went well; the patient sat up out of bed and had a full diet in a week and left the hospital three weeks and four days after operation; the wound being reduced to a healthy granulating surface, level with the skin, through which no urine came; it has since healed perfectly, and gives no discomfort.

Two noticeable facts became apparent as healing went on: 1st. That during the early days after operation when the urine from the wounded kidney came through the back, the urine from the bladder was clear and almost quite free from pus, as however the incision closed, pus again appeared in the urine, indicating that the kidney not opened was probably healthy.

In the second place, it was found possible to inject water into the drainage-tube and so through the ureter into the bladder. Pus was still to be found in the patient's urine when he left the hospital, but of course in greatly diminished quantity.

While the term nephrolithotomy is not a new one, yet it has been revived, defined, put upon a good surgical basis, and appended to a successful case by Henry Morris (vol. xiv. *Clinical Soc. Trans.*), to whom is due much credit. It is used to indicate the removal of a stone or stones from an otherwise healthy kidney, as distinguished from such operation as may be necessary to remove a stone or stones from a kidney dilated by pus or urine, or where the stone

¹ Read before the American Surgical Association, April 22, 1885.

may have escaped by ulceration into the perinephritic tissues, or where a sinus opening externally conducts the operator to the stone, or indeed where the kidney may present evidence of much disease.

A lumbar swelling which fluctuates, is opened, discharges pus and permits the operator's finger passed through the incision to touch a stone free in the abscess cavity, is a very different procedure from that for removal of a small stone from the kidney cortex which has not set up suppuration, yet I venture to hope that at no distant period the one will be operated for as certainly as the other. The matter is an affair of diagnosis, to obtain which it is most fitting to question the experience of others.

Four-fifths probably of individuals hitherto subjected to nephrolithotomy have been young, between 19 and 30 years inclusive, but it is fair to suppose that this experience will be changed somewhat as the necessity for the operation becomes more widely recognized, since all the patients suffered for years before the stone was removed; a calculus is removed from the urinary bladder when discovered, and I would apply to the kidney pelvis a similar treatment. The male sex largely predominates, in this respect differing not at all from that which one would expect, since calculus of the bladder in the male is so much more often met with than in the female.

I find no occupation apparently particularly liable; statistics, however, are not full enough to warrant any conclusion. From a limited number of observations it would appear as though the left kidney was the more often affected, although the excess is small. The theory of hereditary predisposition is not supported. The symptom which is most prominent throughout, and the one for which the physician is consulted is pain. Pain was complained of for a long time, thus a male aged 50 suffered during 24 years; a male aged 24 suffered since schoolboy days; a female aged 19 since 8 years of age; a male of 19 since 7 years of age; a man of 19 for 8 or 10 years; a female of 23 during the past seven years, and this is the history with all. With all, the pain for a long time, if not always, is paroxysmal, recurring at first rarely; subsequently, however, the intervals become shorter and shorter, until finally constant suffering may be experienced. The acuteness of the attack is apt to be in direct ratio with its frequent recurrence. This is not an unvarying rule and the intermissions are occasionally long, in one case four and in another ten years of rest being enjoyed. Sooner or later there may occur, however, a marked exacerbation in all symptoms, which I am inclined to attribute to a dislodgement of the stone from its fixed position, thus permitting movement in the kidney pelvis, with injury to the mucous membrane.

Pain is described as follows by different reporters:

At varying intervals from a day to a week; during the past four years pain has nearly left him, now he has a dull pain on exertion.

Pain in loin shooting to testicle, which is retracted; pain and tenderness on deep pressure in loin.

Shooting pain in right lumbar region, in groin and loin. No tenderness or resistance; this appeared by the time of operation.

Neuralgia of testicle daily and for several hours;

during an attack the patient writhed with agony, the testicle was drawn into the canal and could not be touched. An attack was usually preceded by pain deep in the belly, also by lumbar pain.

Hidden pain in loin, side of belly, testicle, inside of thigh. During four years, attacks occurred every six months, then constant pain for two years, and finally during ten months the patient has remained in bed.

Great pain in the loin down the ureter to testis and thigh, followed by hæmaturia. Pain has been observed to shoot down the thigh as far as the knee. Atrophy of the testicle succeeded the pain in one instance. Exertion, in all cases that I have noted, has given rise to pain, and especially such motion as throws the muscles of the loin into action. Sudden active movement induces much suffering in an advanced stage of the malady. The lumbar muscles are occasionally quite strongly contracted and rigid over the affected kidney, and the outer portion of the external oblique may be likewise contracted; under anaesthesia this symptom will disappear. A lumbar swelling and dulness have been in one instance observed to disappear under anaesthesia, doubtless muscular rigidity had much to do with their presence. Frequency of micturition has been noticed several times, particularly after a paroxysm. Symptoms referable to the urine are not very clearly defined, since during the years of suffering the urine will probably have indulged itself with various changes at different times; the urine is thus described in various cases:

Sp. gr. 1010, neutral, contains blood and triple phosphates; later, urine from the same patient contains albumen and pus, with sp. gr. 1024.

Sp. gr. 1020, acid, trace of pus.

Sp. gr. 1020, in copious quantity during the twenty-four hours, never any pus or blood.

Sp. gr. 1020, alkaline, pus, no blood or casts; a few days later blood appeared and the urine became acid.

Probably a noticeable fact from a diagnostic standpoint is rapid change of urine from alkaline to acid, or the reverse, without apparent cause, dietary or what not. The constituents of the urine may be thought of from a similar standpoint. Blood will probably be found in the urine according as much or little exercise has been indulged in, in one instance it is thus described: The urine is dark with blood after exercise, rest cleared it up; in another instance: blood in quantity has been passed lately after exercise, enough to obstruct the urethra by coagula; after a paroxysm, blood is apt to be present in the urine. Sand and gravel have both been exceptionally met with. Casts of the urinary tubules are observed very rarely, probably because they are hidden by other constituents of the urine. But the indications of stone already noted do not suffice for a diagnosis any more certainly than calculus of the bladder is accepted as present without being touched, so the kidney must be exposed and sounded. It goes without saying that the incision to expose the kidney is to be utilized for extraction if a calculus be found. The incision which is as convenient as any other, is one parallel to the last rib, and about half

an inch below it; or the usual colotomy incision will do, and the kidney sought for posterior to the colon. The quadratus lumborum is to be divided and erector spinæ if necessary, since an empty colon moves towards the spine, carrying the peritoneum, and both should be avoided. A thin fascia has been recognized in the perirenal fat, but this may be disregarded, for as soon as this fat is exposed the finger can feel the gland, and it may at once be cut down upon. The length of the various cuts will depend upon the exigencies in each case. The rise and fall of the kidney with the respiratory movements have been observed in more than one instance. Examination of the exposed kidney by touch, is to be made from in front, as strongly urged by Howse, the gland is thus pressed against the psoas muscle, which offers resistance, and enables the investigating finger to appreciate changes in density, etc. I think it inexpedient to explore widely in the perirenal tissue, for the kidney will probably be opened, and a split kidney will cicatrize more comfortably with its connection to surrounding parts undisturbed, than not. Failing to recognize a stone by touch, a needle may be passed into the kidney and the pelvis explored. This is the usual method. I am rather of the opinion, however, that it is needless, and that the kidney which justifies exposure also justifies cutting open and exploration of its pelvis. Acupuncture holes are apt to bleed somewhat for a moment or two. The kidney is to be opened by a longitudinal cut, which bleeds very sharply, but yields to pressure promptly, and probably also to hot-water irrigation. If Paquelin's cautery is used, there is no bleeding. It is interesting to learn that in one case, that reported by Anderson, the stone had two projections like the fangs of a tooth, between which was engaged a piece of renal substance; in extracting, this piece was torn away bodily, yet no harm resulted and the wound healed promptly. It may be inferred from the foregoing that the kidney is to be treated as other glandular organs of the body, and will heal as promptly. The finger is the best instrument with which to explore the kidney pelvis, as well as the secreting substance from within.

The smallest stone that I have noted is that of Howse, oxalate of lime 26 grains; the largest is the one now reported and shown; the next largest is that of May, crystalline phosphate of lime with nuclei of oxalate, 473 grains. Calculi hitherto extracted are largely made up of lime oxalate and phosphate. The mortality following this operation is small, probably five per cent. or ten per cent. at most, even now in its very infancy, a mortality which may confidently be expected to decrease as we gain experience. It will probably take its place among the most successful of major operations.

Will the kidney, the subject of nephrolithotomy, return to a healthy condition? Time must reply to this query; at present no answer can be given; a sufficient period has not elapsed since Morris's first operation, 1880. On general principles we should expect a return to health after removal of a foreign body, but we know that the age of the patient has much to do with permanent and complete recovery after removal of stone from the bladder, so I am in-

clined to think that the same may hold good in regard to the kidney pelvis. May's patient, three months after operation, passed urine sp. gr. 1020, alkaline, containing mucus, pus, and triple phosphates. The possibility of a recurrent attack suggests itself, but we are without data on the subject.

I have mentioned that I was able to inject my patient's bladder with water through the ureter. This has been to me a fruitful theme.

Exploration and catheterization of the ureter from the bladder in the female has been attempted not over successfully, but it could be done from the kidney extremity in either sex. The injection of colored water through the ureter, a catheter having been passed into the bladder through the urethra, would demonstrate its patency in case of pressure by a tumor or calculus; or the latter might be touched by a slender flexible bougie, metal tipped, and extracted. There is still another way in which this suggestion might be utilized, when a nephrotomy has been done and the question of removing the diseased kidney arises, by washing out the ureter, and then plugging it, the urine from the other kidney could be collected and its healthiness investigated, for wherever a nephrectomy is under consideration the fitness of the remaining kidney for the extra work to be thrown upon it will come up for discussion. I am inclined to institute a comparison between the reservoirs at either end of the ureter, when, in addition to the normal fluid contents, a stone is present. In both, certain symptoms occur which we should recognize; in both, we should sound, find the stone, and extract, and I am strongly inclined to believe that in nephrolithotomy, as in lithotomy, the age of the patient, as already stated, has much to do with the outcome. How important then is it to diagnose and operate early.

There remain for consideration a certain set of cases, in number not a few, which cases have been diagnosed as fit subjects for nephrolithotomy by not only competent, but by eminent surgeons, and yet no stone has been found after the kidney was exposed, and also, after the kidney was cut open and explored by the finger; for instance (*Lancet*, June 2, 1883, p. 948):

C. S., aged 29 years, married, female, dated her illness from an attack ten years ago, characterized by sudden and excruciating pain in right loin, accompanied by vomiting.

Shortly after this her urine smelt badly, and contained a yellow deposit. She came under the surgeon's care February, 1881; chief symptoms were lumbar pain, increased by exertion, fetid urine, and frequent micturition. Under ether, nothing was found wrong with the bladder, uterus, or rectum. There was no lumbar swelling. Urine acid, and contained pus. January, 1882, on examining the right loin something was felt to slip under the fingers, she at the same time complaining of a sharp, stabbing pain.

On admission she complained of severe pains in right loin, which extended from groin into the labium and down back of thigh; they were increased by exertion, and prevented her from walking any considerable distance. Urine alkaline faintly; sp. gr. 1014; gave reaction to guaiacum blood test. Microscope showed triple phosphates, mucus, pus, shrivelled blood corpuscles. She got thinner, and became slowly worse.

December 25, 1882, kidney exposed; it was observed to rise and fall in respiration. No resistance could be felt in it. It was punctured in three places with an acupuncture needle, a gritty sensation attending the last puncture. The kidney was cut open and the pelvis explored with the finger, but nothing was found. Hemorrhage small, and ceased spontaneously very soon.

The wound was closed, and recovery followed. March 8, 1883, patient was going about her work without pain, but urine continues rather unpleasant. The operator (Lloyd) says: "Whatever her disease is, I feel sure it is situated somewhere between the bladder and the kidney substance, and is out of reach of surgical investigation."

I cannot avoid thinking that the territory between the kidney and bladder is not out of reach of surgical investigation, and that if the methods of exploration already noted in this paper had been employed, something might have been learned concerning the "dark continent." I do not accept the diagnosis of the reporter.

Here is another case (*Bull. de Thérap.*, 1881, 101, p. 343):

M. X., aged 55 years, suffered from several attacks of left nephritic colic, especially during the past three years, which were followed by the passage of uric acid sand, extremely fine; no piece of gravel had ever been passed. For more than six months continuous pain, with a sense of impending colic, rendered it impossible for him to continue his occupation. Finally the patient was obliged to remain in bed, or else to occupy an extension chair; walking induced much suffering. The left loin appeared more large and rounded than usual. Percussion here awakened suffering, as did also pressure. No febrile phenomena existed.

The kidney was exposed by incision; digital examination revealed nothing; acupuncture practised four or five times; a grating sensation, attributed to small sand; later a stone was believed to be struck. With Paquelin's cautery an incision, six or seven centimetres long, was made into the kidney, but no stone finally found. The wound healed, and complete cure resulted.

The incision through the fibrous capsule, dislodgement of small sand from kidney substance, and revulsive action of cautery are believed to have contributed to a cure; but the operator gives the most credit to free division of the kidney capsule, and with this opinion I concur. The irritation set up by the presence of sand in the kidney substance, or by adjacent inflammation in the pelvis of the kidney, is sufficient to determine a congestion and swelling of the gland, which will, of course, be resisted by the fibrous capsule, hence pain results, and if the pelvis is inflamed, pus, etc., will be in the urine. A similar train of symptoms is seen when the testicle becomes painful and tense from inflammation in an adjacent epididymis. In both cases similar treatment brings relief, namely, division of the fibrous capsule.

With our present knowledge, then, it is apparent that the symptoms of kidney stone may be so closely imitated as to deceive any one, but while the diagnosis is in doubt the treatment is not: a free incision is demanded.

To the comparison already made between bladder and kidney pelvis, I would add another, that both may require free incision, drainage, and rest, to bring about a cure of chronic inflammation, thus

still further applying a common rule to different parts of the urinary apparatus, and so simplifying surgery.

THE INFLUENCE OF THE BROMIDES IN THE PREVENTION OF IODISM. REPORT OF A CASE.

BY HENRY SELDEN NORRIS, M.D.,
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DURING the past four months there has been under my care, a case of bone syphilis and periostitis, in a man thirty-six years of age, in whom the obstacles to treatment were, to me, rather unusual. In the beginning he informed me that the iodides acted very badly with him, producing such severe coryza that it was impossible for him to take them except in insignificant doses. Still, he expressed his willingness to try them in whatever form or amount I might think necessary, and to persevere in their use if such a course should seem desirable.

Disregarding, to a certain extent, this statement concerning his idiosyncrasy, I began by ordering five grains of the iodide of potassium three times a day, in water, intending to increase the dose gradually. The first dose produced a metallic taste in the mouth, a feeling of tension about the forehead, and slight sneezing; the second increased all these symptoms and caused, in addition, a profuse watery discharge from the nose, lachrymation, swelling of the nose and eyes, and great general discomfort. Notwithstanding this condition, the third dose was taken, which still further aggravated the coryza and produced headache, restlessness, and real suffering, which lasted throughout the night. The next day his eyes and nose were red and swollen to disfigurement, both discharging water freely, and he felt ill and scarcely able to go to his business.

I waited until all the catarrhal symptoms had subsided and then tried the iodides of sodium, ammonium, and lithium, in turn, with the same results. The syrup of the iodide of iron, in teaspoonful doses, resulted similarly. Gardner's syrup of hydriodic acid in drachm doses, was well borne, and I thought I had at last found a form in which iodine could be taken, but as soon as the dose was increased to two drachms coryza appeared, and it was abandoned. I then went back to the iodide of potassium, which I gave in one grain doses to begin with. This produced a salty taste in the mouth, and was increased to two grains without any further manifestations, but could not be increased to three grains without unpleasantly severe symptoms.

These experiments occupied some two months. I gave the salt in water, in syrups, and dry in capsules. I used the latter thinking that perhaps the contact of the solution with the mucous membrane of the pharynx had something to do with the extreme susceptibility, and noticed that a larger dose could be taken in this way than in any other, but the difference was not important.

No improvement taking place after these prolonged and varied efforts, I thought that my perseverance with the iodides had possibly increased my patient's susceptibility to their unpleasant effects, and I de-

cided to abandon them entirely for a time, hoping that by so doing I could return to them with a better prospect of success. For the following three or four weeks I gave McDade's "succus alterans," of which he took about twenty-four fluidounces. I would say here, that mercury, either as the protiodide or bichloride, was given from the beginning and maintained throughout. In the meanwhile, the disease was slowly but certainly advancing, and the necessity of iodine becoming daily more apparent, I began again with small doses of the potash salt, but did not find my patient any more tolerant than before. At this juncture it occurred to me that by virtue of their action on the vasomotor system, the bromides might antagonize this action on the upper air-passages. I decided at once to try the experiment, and having in mind the combination of bromine with quinia for the prevention of cinchonism, I combined the iodide and bromide of potassium in the proportion of one grain of the former to two of the latter. I began with five grains of the iodide thus guarded, in water, three times a day, and to my delight no coryza followed its use. After a few days I slowly increased the dose to six, seven, and at last ten grains, always preserving the same relation between the two salts. My patient was then taking thirty grains of the iodide and sixty grains of the bromide a day, and I soon began to see an improvement. Wishing to satisfy myself as to just what part the bromide was playing in the absence of coryza, I one morning directed that ten grains of the iodide should be taken alone. This one dose was followed by such severe coryza that all treatment was suspended for thirty-six hours. I then returned to the mixture as before, beginning again with a five grain dose, increasing slowly and carrying it up to fifteen grains. On forty-five grains a day improvement was pronounced and rapid. Sometimes he would take three doses of fifteen grains each, sometimes the whole quantity in two doses, just as it was convenient, but with the same freedom from coryza.

After the disease was thoroughly arrested and improvement had well begun, I slowly diminished the quantity of bromide, maintaining the iodide at fifteen grains, until in two or three weeks he was taking it alone, and continued to do so until he was entirely well.

My object in reporting this case is not to report a case of syphilitic necrosis and periostitis, so I have said very little about that part of it, but to call attention to the undoubted service rendered by the bromide of potassium in establishing a tolerance of the iodide in a case which was prominently intolerant. Whether it will always thus protect I do not know, having never heard or read of its being used for this purpose before, but where there is this susceptibility to the disagreeable effects of iodine, I would look to the bromides with a good deal of confidence.

MURIATE OF COCAINE IN EXTERNAL HEMORRHOIDS.

BY H. A. SMITH, M.D.,
OF PHILADELPHIA.

THE uses to which the muriate of cocaine has been put led me to try it as a local anæsthetic in the excision of external hemorrhoids.

The patient was a man about fifty years of age, of nervous temperament, with a timidity of pain amounting to fear, dyspeptic, and general health considerably below par. After having exhausted the materia medica of "remedies" and obtaining no relief, he finally consented to an operation. On examination I found the skin and mucous membrane around the anus a mass of corrugations with slight patches of ulceration between the folds; five piles protruded from the anal fissure, four of moderate size and one with a base about one and a half inches in its long diameter.

I considered this an excellent case for operation. After the usual preliminary preparation, I began by injecting about one-third of a grain of muriate of cocaine into each of three of the piles, and in about two minutes, with scissors, I excised them close to the base, the patient experiencing hardly more than slight discomfort. His timidity preventing any further operation that day, a week later I excised the remaining small pile, in the same manner, and then began on the large tumor by inserting the needle of a hypodermic syringe, containing about two-thirds of a grain of the salt into the base of the tumor, injecting a few drops just under the skin, then traversing the pile in its entire length, depositing the solution in the track of the needle to a point just within the skin on the opposite side. I withdrew the needle, inserted a tenaculum, put the pile upon the stretch, and excised it without inflicting the slightest sensation of discomfort except that caused by the entrance of the needle into the skin, much to the surprise and delight of the patient.

This operation suggests to me the probability of the usefulness of this drug in the painful clamp and cautery operation for the removal of internal piles.

After the operation there was an unusual amount of mental excitation, slightly flushed face and contracted pupils. This may have been due to the reaction from his profound depression previous to the operation, as I have not heard of any such effects having been attributed to the drug in the amount used.

MEDICAL PROGRESS.

PATHOGENESIS OF SMALL CYSTS OF THE EPIDIDYMIS.

—DR. CH. MONOD, in a paper read at the recent French Congress of Surgery, considers that the origin of small cysts in the epididymis is in relation:

1. With the extent of the sclerosis of which the testicle is the location in men of ages ranging from fifty to sixty, and beyond.

2. This sclerosis, which is principally peritubular, in some regions results in complete obliteration of the tubules of the epididymis, as a result of which there is varicose dilatation behind the constricted portion of the tubule.

3. The formation of the cystic cavity results from the development of these ampullar dilatations.

4. Cystic dilatations are either multiple or disseminated throughout the whole thickness of the head of the epididymis, or less numerous, forming isolated tumors and easily detached from the subjacent tissue of the epididymis.

5. The process by which they are formed is analogous to that by which cysts are developed in the kidney during the course of interstitial nephritis, or in the parotid gland subsequent to the ligation of Steno's duct.

VICE OF CONFORMATION IN THE PENIS.—M. GRIAS reported, at a recent meeting of the Anatomical Society of Nantes, a singular anomaly in the conformation of the penis, in which the organ appeared to have undergone a complete rotation, whereby the inferior surface had become superior, and vice versa. The following is a full description of the anatomical disposition of the component parts of the organ.

The corpora cavernosa were normal in respect to volume and length. The canal of the urethra was situated upon the superior groove formed by their apposition. Their inferior face was occupied along their whole length by a vein one-half inch in diameter. The glans was of normal form. The meatus urinarius occupied its summit, and a sound could easily be introduced into the bladder. The frænum was situated upon the superior surface of the glans; prepuce normal. On cutting the urethra longitudinally along its superior wall, it was found:

1. That neither the corpora cavernosa nor the corona of the glans were reached by the incision.

2. That the frænum was divided, and that the glans, whose direction in the normal penis in its flaccid state is from above downward and from behind forward, was here directed from above downward and from before backward.

3. That the bulb of the urethra is found not below the canal, but on the upper portion of that wall, and was embraced in the incision, which being extended to the neck of the bladder, the veru montanum was seen upon the opposite surface of the urethra. The vesiculæ seminales and the prostate gland were in their normal position.

Similar cases were reported in 1859 by MM. Verneuil and Guerlain.—*Gazette Medical de Nantes*, April 9, 1885.

RESEARCHES UPON THE RESPECTIVE RÔLES OF PTOMAINES AND MICROBES IN THE PATHOGENESIS OF SEPTICÆMIA.—Drs. JEANNEL and LAULANIÉ, at the late meeting of the French Surgical Congress, expressed their views as to the etiological relation of microbes and the ptomaines to septicæmia as follows:

1. The respective rôles of microbes and ptomaines may perhaps be determined by a comparative study of the absorption of saline solutions and putrid solutions from the surface of granulating wounds.

2. Any substance capable of being absorbed is immediately taken up from the surface of a granulating wound by the process of endosmosis. Therefore, the ptomaines which are in a state of solution are absorbed as soon as they are produced upon the surface of such a wound.

3. The granulating membrane is a filter which permits the passage only of such substances as are in solution, and not of those held in suspension, such as microbes and other albuminoid bodies.

4. Septicæmic fever is never observed in those having granulating wounds the surfaces of which are covered with putrid pus, for the reason above stated.

5. When the granulating surface of a wound secreting pus is broken or unhealthy, fever becomes a prominent symptom: because the filter (granulating surface) being broken the passage of the microbes contained in the pus is permitted.

6. If the intact granular membrane absorbs the ptomaines by endosmosis when they exist upon the surface of the wound and nevertheless the injury is not complicated with fever, and if, on the other hand, septicæmic fever in one or the other of its recognized forms is only manifested when by breaking of the granulating membrane the microbes are enabled to enter the economy, it is evident that the ptomaines are only a secondary element, while the microbes exercise the principal influence in the production of septicæmia.

THE TRANSMISSIBILITY OF TUBERCULOSIS BY MEANS OF THE SPUTA OF PHTHISICAL PATIENTS.—PROF. S. SIRENA and DR. B. PERNICE have lately made a series of investigations upon the transmissibility of tuberculosis by means of the sputa of phthisical patients. Their experiments were performed with great care as to details, and lead to the following conclusions:

1. The liquid obtained from the evaporation of tubercular expectoration is constantly free from the bacilli of Koch, and, when injected into the cornea, subcutaneous cellular tissue, or into the peritoneal cavity, as a general result, produced neither local nor general tuberculosis.

2. That phthisis-producing bacilli are not found in the surrounding atmosphere, as a result of evaporation of tubercular sputa, though such organisms may be very abundant therein.

3. Respiration for several hours, or for a protracted period of several days, in a close atmosphere in which are contained the exhalations from phthisical sputa, does not produce tuberculosis in animals.

4. Animals confined in close quarters and compelled to breathe an atmosphere laden with the dust of dry tubercular sputa, do not contract tuberculosis.

5. The subcutaneous injection of tubercular matter produces for the most part a local specific manifestation, as is shown by the presence of tubercular bacilli in the pus of the lesion, and after a variable time produces tuberculosis of the abdominal or thoracic organs.

6. The injection of tubercular sputa into the peritoneum, produces first a local, and secondarily general tuberculosis in animals.

7. Tracheal injection of a solution of tubercular sputum, even in animals affected with broncho-pulmonitis, is not the cause of a specific infection, but for the most part of septic croupous pneumonitis characterized by the presence of micrococci on the exudation.—*Gazzetta degli Ospitali*, March 29, 1885.

HYPODERMATIC INJECTION OF SODIUM IODIDE.—M. ARCARI, in the *Gazzetta med. Ital.*, Lombardia, 1885, No. 11, recommends the hypodermatic injection of sodium iodide in syphilis, when irritability of the stomach renders its administration by the mouth impossible. According to M. Arcari, the same result obtained by ninety grains of the drug administered by the stomach, may be procured by thirty grains by the mouth, and two hypodermatic injections of two and a half grains each, daily.—*L'Abeille Médicale*, April 30, 1885.

THE MEDICAL NEWS.

A WEEKLY JOURNAL
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SATURDAY, MAY 23, 1885.

THE PLYMOUTH EPIDEMIC.

THE weight of evidence thus far collected tends to the conclusion that the disease which has prevailed in the town of Plymouth since early spring, is true typhoid fever caused by the specific contamination of a mountain stream, partly supplying the town with drinking water, by the excretions from a case of fever which were deposited on the surface of the ground close to the stream, and washed into the current by the melting of snow and by rains. It had not occurred to the physician and attendants of this case to destroy the specific character of the dejections; otherwise the record of this dire calamity probably would not have passed into history.

The sequel affords a most impressive lesson, by no means new, as similar and equally conclusive cases have every now and then been brought to public notice. Among these may be mentioned, for the sake of comparison, the outbreak of typhoid fever in the village of Nunney, recorded by Ballard. Here the inhabitants had been in the habit of using the water of a stream more or less polluted for years without causing fever; but when a case had come into the village, and the discharges from this person were washed into the stream, a virulent outbreak of fever occurred. Between June and October, 1872, no less than seventy-six cases occurred in a population of 832 persons. All those attacked drank the stream water habitually, or occasionally. All who used filtered rain water or well water escaped, except one family who used the water of a well only four or five yards from the brook.

The remarkable outbreak of fever which occurred in North Boston, N. Y., in 1843, described by Dr.

Flint, is equally instructive. No cases of typhoid fever had ever been reported in the village until the year named, when a traveller, who had been several days sick, arrived at the inn. The evacuations from the fever-stricken patient were thrown into a cesspit in close proximity to a well which supplied most of the village with water. Over half the community were attacked with fever, and all these persons had used water from the tavern well, daily. These cases show conclusively that the water produced the disease, and though polluted even with excrement, no enteric fever appeared until the specific agent of the disease was present.

The practical lessons of prevention relate to the treatment of the passages of patients sick with infectious disease, and the preservation of the water supply from impurities. It is unquestionably the bounden duty of those having charge of cases suffering from diseases transmitted by means of the alvine discharges, such as typhoid fever, cholera, dysentery, scarlet fever, etc., to see that the dejections are wholly disinfected at their very issue from the body. For this purpose chloride of lime, dissolved in soft water, in the proportion of four ounces to the gallon, or corrosive sublimate dissolved in soft water, in the proportion of two drachms to the gallon, are most efficient agents.

The protection of the water supply from impurities involves an exact knowledge and vigilant supervision of the source, collection, storage, and distribution of the supply. Sewage and all foul matter, especially of the excremental sort, should never be permitted to flow into a stream used for drinking water. In the town of Plymouth the small volume of water and the nearness of the points of infection and of distribution, were conditions favorable to a violent eruption of disease. The water supply of large cities is often similarly polluted, but the great bulk of water, by its dilution and other natural means of purification, has doubtless prevented an occurrence similar to that which has overtaken unhappy Plymouth. Nevertheless, the apparent self-purification of running streams which have been certainly polluted in some part of their course, cannot be depended on as a guarantee that the water is fit for domestic use. Disease germs are very difficult to deprive of their vitality; they may be even frozen and yet preserve their activity. Admitting the presence of disease germs in water, it may be diluted until the chance of taking even a single germ into the system is so small that it may be disregarded; and yet, if the prevailing theory be true, a single germ, if taken, may produce disastrous results.

The whole subject reverts to the one essential condition of cleanliness as the most certain preventive of disease. The complete and inoffensive removal of all refuse matters as fast as produced, and the

rendering innocuous of such matters as are unavoidably detained, are cardinal rules of sanitation. Had the authorities of Plymouth applied these rules, the people of that quiet town would have been spared the harrowing incidents of the past few weeks.

This local outbreak of typhoid fever above alluded to furnishes a fresh illustration of the serious consequences which sooner or later follow after a reckless disregard of the laws of health. What has happened at Plymouth has happened before and will happen again. People become accustomed to these occurrences, and pay little heed to the lessons they teach until the pestilence is at their own doors. Then wisdom is purchased at a terrible cost.

It needs no argument to show that the scourge from which the people of Plymouth are suffering might have been prevented; or that, with proper sanitary administration, either local or general, its progress might have been stayed long before this. For the want of such administration, weeks have elapsed before the true cause of the disease has been satisfactorily determined, and then only by voluntary investigations, prompted by a desire to extend aid to fellow-beings in distress.

No stronger argument need be required for the prompt organization of a State Board of Health than that furnished by the circumstances connected with this outbreak of disease. Had such an organization been in existence, it would have demonstrated its usefulness, by promptly determining the cause of the sickness, and by instituting measures for its speedy removal. It is time that our legislators realized the serious responsibility they incur by ignoring the true wants of the people. The bill for the creation of a State Board of Health should be passed without any further delay, and the people relieved from the reproach which has been cast upon the good name of the Commonwealth by continued inaction.

NITRO-GLYCERINE IN CONTRACTED KIDNEY.

It is well known that hypertrophy of the left ventricle is sooner or later an almost constant symptom of contracted kidney, and in the later stages, at least, of the disease, it becomes, through its powerful impulse, one of the most annoying of symptoms. It is generally conceded that this cardiac complication is the result of the renal affection, although all are not agreed as to the precise method by which it is brought about. It is, also, thought by some that the hypertrophy is compensating in character; that the increased amount of blood forced through the kidney gives rise to increased secretion of urine; and that in this way is made up the required excretion, otherwise impossible by reason of the diminished secreting surface in the contracted organ.

Recently, however, ROSSBACH, of Jena, in the *Berliner klin. Wochenschr.*, for January 19, has ventured to oppose some objections to the view that the polyuria of interstitial nephritis is due to increased blood pressure and an accelerated circulation through the healthy parts of the kidneys. He bases these objections upon the fact that by means of nitro-glycerine we can reduce the blood pressure to the normal degree, or even below it, notwithstanding which the secretion of urine not only continues increased, but a very annoying set of symptoms, including the uncomfortable palpitation and eye symptoms, and even uræmia, are decidedly relieved. He shows further, by the reports of three cases, that the effect of nitro-glycerine is not only to increase the amount of the twenty-four hours' urine, but also to diminish the percentage and amount of albumen contained therein.

These facts certainly go to show that the polyuria of contracted kidney must be due to some other cause than the cardiac hypertrophy and increased blood pressure. Possibly, as suggested by Rossbach, they may result from an increased permeability of the still sound capillary walls to the blood fluid. That such permeability exists in chronic interstitial nephritis, not only for crystalloid and colloid substances, but also to solid particles, has been shown by Thoma in *Virchow's Archiv*, Bd. 7, 1877.

Be this explained as it may, we look upon the therapeutic value of nitro-glycerine with increased favor under the circumstances. Rossbach recommends that it be prepared for administration in the following way: A given quantity is weighed, dissolved in ether, and this solution well mixed with two parts of chocolate powder, and one of gum-arabic, so that 3086 grains of the mixture will contain 1.5 grain of nitro-glycerine. After the ether has completely evaporated, the resulting powder is mixed with sufficient water to produce a thick paste, which, after hardening completely in suitable forms, is divided into parts containing from 0.0077 to 0.015 grain of the nitro-glycerine, of which the dose is one, ten to fifteen times a day, in hourly doses until the effect is obtained.

Comparative observations by Rossbach upon the use of nitrite of amyl, nitrite of sodium, and nitro-glycerine, all of which have a depressing effect upon blood pressure, have shown that the last is altogether to be preferred. Nitrite of amyl is objectionable, on account of its powerful and uncontrollable action and the short duration of its effect, and the vertigo, headache, tendency to nausea, perspiration, and sense of weakness it induces. In like manner, the nitrite of sodium and potassium produce general discomfort, headache, and nausea. On the other hand, the headache produced by nitro-glycerine rapidly disappears, and after a few days the patient

not only becomes accustomed to it, but is so much relieved that he loses consciousness of the fact that his disease is still present and even progressing, for Rossbach has no facts to show that it is in any way able to arrest the disease, although further observations by careful observers are required before the possibility of such effect can be denied.

A NEW PROCEEDING IN PERINEORRHAPHY.

THE January number of the *Revue Medico-Chirurgicale des Maladies des Femmes*, states that KOEBERLE has recently made known a new method of restoring the perineum completely torn in labor. As the obstacle to reunion proceeds from the distention of the intestine by fecal matter resulting from contraction of the anus, Koeberle obviates the difficulty thus: He freely divides the anus posteriorly, the incision extending beyond the circular fibres, and involving the connective tissue situated behind the rectum. There is thus made a large funnel-shaped opening through which fecal matter can pass freely until cicatrization of the recto-vaginal wall is complete.

By referring to the *American Journal of the Medical Sciences*, for November, 1837, it will be seen that the late Dr. William E. Horner then first proposed division of the anal sphincter on each side, and that, in 1848, he put this proposition in practice in a case of complete laceration of the perineum upon which he operated. This operation is reported in the same journal for October, 1850. It seems to us that Horner's method would attain the object sought by Koeberle's quite as well as that of the latter. At least we see no "new method" in Koeberle's practice, as essentially the same thing was done so many years ago by Horner.

Furthermore, the late Baker Brown, who, notwithstanding his clitoridian craze, which led to his ignominious expulsion from the London Obstetrical Society a few years before his death, will long be remembered as one of the most brilliant operators in the surgical diseases of women, was accustomed to divide the anal sphincter posteriorly subcutaneously. More recently Hegar has strongly advocated two lateral incisions upon the posterior border of the anus.

All these methods, though used in the secondary operation for ruptured perineum, or perineoplasty, as it ought to be called in distinction from perineorrhaphy, which strictly signifies only the use of stitches, had the same object as that now credited to Koeberle.

INOCULATION AGAINST CHOLERA.

FROM Spain we have accounts of experiments by DR. FERRÁN upon the vaccination of human beings

against cholera with a mitigated virus. Without full details, it is difficult to judge of their value. He appears to have followed a further stage of development of the bacillus—a spirillum form which is also referred to by Watson Cheyne in his recent report. In what way the mitigation of the virus is produced is not clearly stated, though time and the action of oxygen are mentioned.

About twenty minims of a culture are injected subcutaneously, and within a few hours the person has a rigor or fever, with constitutional symptoms, which persist for twenty-four hours, and then begin to subside. Subsequent larger injections have no effect.

A Committee of the Royal Academy of Medicine of Barcelona have reported favorably on the experiments; but, whether it will prove a complete safeguard, cannot, in the words of the Committee, be definitely affirmed, without the proof afforded by an epidemic. The British Government has sent a Commission to Spain to examine the results, and its report will be awaited with interest.

GENERAL GRANT.

DURING the last few weeks General Grant has enjoyed a gratifying relief from most of the distressing symptoms which were so prominent in March and the early part of April. But, unfortunately, it cannot be said that the local affection has shown a corresponding improvement. On the contrary, the area involved by the infiltration and ulceration has increased in size. Part of the uvula is now destroyed, and the remaining portion is greatly thickened. The difficulty in opening the mouth, which has always been a serious obstacle to a thorough examination of the pharynx, is also greater, and there are indications that the overgrowth of tissue in the mouth is enough to create an increasing mechanical obstruction there. The lump in the neck is larger, either by its own growth or by the implication of adjoining glands, and the periglandular swelling is also larger.

The special treatment which has been employed for the last month, and which was undertaken solely on the general principle that it should always be tried in such cases as an aid to diagnosis, was pushed to the point of tolerance, and has now been given up. It has served its purpose in eliminating a possible doubt, and, that end having been attained, and its powerlessness to arrest the progress of the disease having been demonstrated, there no longer exists any reason to continue its use.

Meanwhile, the General has been able to resume work upon his memoirs and practically to complete them. He is comparatively free from pain, sleeps fairly well, and is able to walk abroad almost daily.

SOCIETY PROCEEDINGS.

THE AMERICAN MEDICAL ASSOCIATION.

*Thirty-sixth Annual Meeting, held at New Orleans,
April 28, 29, 30, and May 1, 1885.*

(Specially reported for THE MEDICAL NEWS.)

SECTION ON STATE MEDICINE.

TUESDAY, APRIL 28TH.—FIRST DAY.

THE session was called to order at 3.30 P.M. by DR. E. W. SCHAUFFER, of Kansas City, Mo., Chairman.

In the absence of Dr. J. N. McCormack, of Bowling Green, Ky., Secretary, Dr. F. W. Parham, of New Orleans, was requested to act.

DR. JOHN AVERY, of Greenville, Michigan, read a paper on

STATE AND LOCAL BOARDS OF HEALTH.

The protection of the health and lives of its citizens is the highest duty of the State. The poor man's health is his capital, and the wages of each day's labor is the interest that capital pays to its owner. It is as much the duty of the State to protect that capital and make its owner secure in its possession and enjoyment, as it is for it to protect a railroad corporation in its franchise. All just governments have enacted laws by which they hold a man responsible for an injury done to another man through carelessness or malice, and which disables him from labor. And, also, laws to prevent the unnecessary spread of diseases which endanger the health and the lives of the citizens of the State. The latter are known as the public health laws of the State.

In the twelve years since its organization, the Michigan Board of Health, besides performing the duties required of it by the law, such as publishing and distributing its reports and a large number of monographs on subjects relating to public health; recording the deaths; investigating epidemic diseases, their origin, causation, and prevention; analyzing articles of food and water; visiting various places in the State where nuisances were complained of, and also the various correction and charity houses; examining plans of public buildings, and giving proper advice as to the best methods for their proper heating, lighting, and ventilation; it has also endeavored to awaken a more general interest among the people in sanitary matters.

This it has done by inaugurating and conducting a series of sanitary conventions in the principal cities, towns, and villages of the State. These conventions are aided by a committee of the citizens in the localities in which they are held. Persons interested in sanitary work are invited to read papers; and these, together with the synopsis of the discussions, are published in pamphlet form and distributed gratuitously. These conventions are always fairly attended, and the people are gradually being educated.

The State Board is in direct and frequent communication with every city, village, and township in the State, and acts as a sort of central signal station.

The Local Boards of Health are charged with the duty of administering and enforcing the laws relating to

the public health, and they must immediately notify the State Board of the appearance of communicable disease in their localities.

The law confers upon Local Boards of Health authority to make and enforce any regulations necessary to protect the citizens of their respective municipalities against the spread of communicable diseases.

Under the beneficial action of these Local Boards of Health, the people are gradually being educated to the necessity of protecting themselves against communicable diseases, and to demand their complete isolation for the protection of the community. But the people are forgetful and neglectful; and need to be constantly reminded of the sources of danger which threaten health and life. And in no way can these reminders be so generally, authoritatively, and effectively given as through a well-organized and well-conducted State Board of Health.

THE CHAIR asked Dr. Avery if the State Board of Michigan made any provision regarding the practice of medicine in that State.

DR. AVERY replied that the law gave no such authority to the State Board. A bill had been recommended to the Legislature giving the right to the Board to regulate the practice of medicine in the State, but it had failed to pass. There was a law requiring every practitioner in the State to register; but that law gave the privilege to any one who had practised, or who swore he had practised for five years prior to it, to register on the same footing with an educated physician. It was expected that this law would be amended, so as to require all coming into the State after its passage to go before a Board of Examiners before being allowed to register; but the law failed to provide for the Board of Examiners.

DR. RAUCH, of Illinois, said he had found great opposition in his State to any law regulating the practice of medicine. To pass such a law, it is not sufficient to get it before the Legislature: the people must be in accord with the spirit of the law. The legislators would not pass any law that would make them unpopular with the people. The people must first be educated: they must be taught that the provisions of the law are for their benefit, and not for that of physicians.

WEDNESDAY, APRIL 29TH.—SECOND DAY.

Dr. Nelson read an abstract of the paper of DR. FRANK S. BILLINGS, of Boston, on

STATE MEDICINE.

Practical experience has taught monarchical governments that "public health is public wealth," and that there must be a Department of State Medicine. No government is true to its duties that does not support State Medicine. Owing to the geographical relations of the United States, public health is not here to the same extent as in Germany and other European States, a national necessity. But, to gain public health, public health is with us a national necessity. As no organ or region of our body may become diseased without causing the whole to suffer, so no part of a country may be ravaged by an epidemic without causing injury to the whole nation. It is the duty of every government to study the needs of the people,—to encourage and support research,—so that the resources of the country may

be fully developed, and that the people may be so protected that they may pursue their daily avocations in safety. They should not wait until public excitement makes them act.

All true governments must be parental, whatever their constitutional form may be. In our own country, the first difficulty is to know what we shall do with our medical school system. There are too many medical schools. We should, in the future, try to improve the quality and not the quantity of graduates. The profession is not united enough to admit of examining boards, elected by the profession and authorized by the government. There must be concerted action on the part of every true physician in the United States. The medical schools should be made to conform as far as possible to a uniform plan of instruction. A legal stop should be put to the endowing or incorporating of any more schools in States where one endowed school already exists. The aim should be to have in each State only one endowed school, which should be made scientific by State force. We should do our best to strengthen our best endowed school in our respective States. It is better policy to reform such a school than to weaken it by starting a weaker opposition school.

Where the schools are State schools the Faculty should be the examiners. Under existing circumstances it would better rest in the State Boards of Health, which should consist of specialists upon hygiene, a hygienic engineer, and a competent jurist. The board of health should then be the examining, diploma-granting, and licensing-to-practise body of the State, and the schools must govern themselves accordingly. No man should practise without the diploma or license of this board.

The medical service of the country should form one comprehensive public health organization. It should begin with a national board of health in Washington city, and a State board in each State. There should be a local board in each city and large town. Each county should have its chief health officer, and each district in each county an official representing preventive medicine. All should be appointed and paid by the State.

DR. HIBBERD, of Indiana, said that boards of health are of political creation, and are not competent to judge of the qualifications of medical men. A competent board, composed of men selected for their fitness, should constitute the board of examiners, who should examine into the qualifications of every individual desiring to practise medicine. He thought the investigation should determine competency in the elementary branches of medicine only.

DR. DABNEY, of Virginia, thought that boards of examiners should confine themselves to an investigation concerning the elementary branches of medicine only.

DR. HAMILTON, of the Marine-Hospital Service, said that the influence and aid of paternal governments in encouraging original investigation had been much exaggerated. Pasteur, Claude Bernard, Koch, and others, famous now as original investigators, were only taken up and assisted by governments after they had accomplished valuable original work. Our Government has itself done much to foster and encourage original research, as witness the National Museum, the Navy Museum, and the Army Medical Museum, in all of which the labors of numbers of men, enthusiastic in pursuit of original investigation, are represented.

DR. J. B. ROBERTS, of Philadelphia, thought the duties of examining boards should properly include two considerations: 1st, inspection of the diploma; and 2d, the examination of the candidate before granting a license to practise. He offered the following resolutions:

Resolved, That the Section on State Medicine earnestly advocates the establishment in every State and Territory of boards of medical examiners and licensers, whose certificate shall be the only license permitting practice of medicine in said commonwealths, though an applicant for license shall previously be obliged to obtain a medical diploma from a recognized medical school.

Resolved, That the Section on State Medicine requests the American Medical Association to direct its permanent Secretary to transmit a copy of the annexed draft of a bill to the secretary of each and every State medical society, requesting that each State society discuss said bill, and report at the next meeting of this Association its views on the desirability of advocating such a bill.

DR. N. S. DAVIS said that in 1844 he had endeavored to have established a preliminary qualification and to require that three full years should be devoted to the study of medicine. He thought the main thing to do was to get the diploma out of the way. This out of the way, the question would be one of competency, and students would not seek a medical college as a place where the right to practise could be acquired at an insignificant cost and in the shortest possible time, but because there they could make themselves competent to practise medicine. He thought there were certain fundamental principles belonging to our institutions, and we could not model our plans after those of foreign countries. The only interference of governments in educational matters should be the establishment of schools where children should be taught to read, write, and spell. Any taxation to accomplish more than this would be unjust. As to boards of health, the same principle should apply. A board might ordain that no man should maintain any nuisance to the detriment of his neighbor, but more than this it could not justly do with a due regard for private rights. When you say that the government should support schools for the pursuit of laboratory investigation, you have gone too far. This would be taxing one man for the benefit of another, and would be wrong. It was all well, and very laudable for schools like Harvard and rich individuals to do these things, for thereby no man would be taxed. He had come long ago to the conclusion that the first thing to do was to get rid of the diploma. Medical colleges would then attempt to get students not by underbidding other schools and reducing its requirements to the capacity of the greatest number, but would depend for its patronage upon its reputation as a place of instruction and its instructors would be selected by reason of their ascertained fitness as instructors.

As to boards of examiners, he heartily approved of them, but thought that their investigation into the qualifications of applicants should concern only the elementary branches of medicine as referred to by previous speakers. Moreover, he thought legislation for or against any system or school of medicine entirely wrong, and he had always been opposed to it. The aim of such a board should be simply to ascertain the

existence of a thorough education in the fundamental branches of medicine.

DR. ARMSTRONG, of the Marine-Hospital Service, moved as an amendment to Dr. Roberts's resolution that the clause requiring a diploma be stricken out.

The amendment was accepted, and the resolutions as amended were adopted.

The Secretary was instructed to present the resolutions in general session, and they were adopted by the Association on May 1st.

SECTION ON DISEASES OF CHILDREN.

TUESDAY, APRIL 28TH.—FIRST DAY.

The Section was called to order by DR. J. N. POPE, of Texas, Chairman.

DR. H. R. KELLY, of Galion, Ohio, read a paper on
THE TREATMENT OF DIPHTHERIA IN CHILDREN.

He said there had occurred five or six epidemics in his community in the last thirty years, and cases every year for the last seven. He recognizes two principal types, the "anæmic," and the "inflammatory."

In the anæmic we find a weak thready pulse, low fever, a feeling of lassitude, little headache, little or no swelling of the glands, the throat looks anæmic, the membranes seem depressed, the edges lower than the surrounding tissues.

In favorable cases the disease lasts from two to three weeks. Croup is more frequent in this variety. When epidemic it causes more or less paralysis. When fatal, patients die generally from heart failure.

In the inflammatory variety the attack begins with a chill, high fever, anorexia, and full and strong pulse. The patient complains of severe headache and earache, the throat glands become enlarged and painful, the face and eyes are congested, and there is more or less delirium. The throat has almost an erysipelatous appearance. The membrane is bright yellow with edges elevated above the surrounding parts. The course is rapid. The nose is generally implicated, and alarming epistaxis may occur. Croup is not likely to appear. The sloughing in these cases is sometimes extensive.

Out of over one hundred cases, paralysis was present in twenty-two, outside of the muscles of deglutition, which were paralyzed in nearly every instance. Only two deaths occurred. The treatment in the two forms is different. In the anæmic, alcohol from the start, quinia if necessary, tincture of iron in full doses frequently repeated. Locally he used, either as a spray or gargle, the following, which has proved most satisfactory:

R.—Acid. carbolic. ʒss.
Acid. salicylic. āāʒss.
Borax ʒiiss.
Glycerine and water . āā q. s. ad. ʒiv.—M.

Sig.—Every two hours alternating with a drachm of a solution of chlorate of potash.

In the inflammatory variety, arterial sedatives at first, then alcohol freely administered, quinia if necessary. Locally, a spray of:

R.—Tincture of iron ʒij.
Chlorate of potash ʒj.
Glycerine ʒij.
Water ʒj.—M.

Sig.—Use every hour. If the membrane becomes fetid, add a few drops of carbolic acid.

Especial attention should be paid to diet. Children should be made to drink as much milk as possible; three quarts a day are not too much.

The treatment of the paralysis is strychnia, quinine, iron, electricity, and good, rich food.

DR. ULRICH, of Pennsylvania, said that his experience would lead him to condemn the treatment. In his own practice he had abandoned the use of local applications. He had seen death produced by an attempt to make an application to the throat. Had first met with the disease in 1860; after a number of disastrous cases, he had scored a number of successes, with the use of large quantities of chlorate of potash. He has not materially changed his treatment since, though he has had an extensive experience. He gives now as much chlorate of potash as the patient will bear, also tincture of iron and plenty of nourishment. He lets the paralysis alone, as it gets well of its own accord. When children in the same family have the slightest sore throat, he puts them immediately on the chlorate of potash treatment.

DR. WILLIAMS, of Michigan, said that he had met with a large number of cases of diphtheria during the four years previous to 1882 as city physician in his city. The variety he has encountered most frequently begins with high temperatures. He gives large doses of quinine, tincture of iron (one drop for every year) every hour, and uses chlorate of potash as a gargle, with instruction to swallow a portion at each gargling. Gives as much nourishment as possible, and stimulants in large quantities. Applies locally tincture of iron after first wiping off the adhering mucus. He has seen the pain in swallowing much relieved by these applications. He does not consider the use of the spray practicable. In four years he lost only one of the city cases.

DR. WHITE, of Texas, stated that he had seen a child with well-marked exudation get well by giving it Epsom salts, and applying locally flowers of sulphur.

DR. ULRICH, in addition to his former remarks, said that the worst cases commence with swelling of the muscles of the neck; generally no membrane can be seen from the mouth, but the nose is always involved; they do not commence with very high temperature.

DR. POPE, of Texas, had seen patches in the throat, with fever, from errors in digestion. He would consider paralysis as proving the disease to have been diphtheria. He mentioned the fact as a matter of curiosity, that diphtheria did not appear in Mexico prior to the coming of the Emperor Maximilian.

DR. KELLY, in closing the discussion, said that a great deal depends on how the local application is made. He did not believe in swabbing out the fauces with a sponge attached to a probang. He had found no trouble in using the spray. He had never had as great success in treatment as during the last year, and had never used the spray before. He had seen patients choke to death with the diphtheritic membrane. It has not been his experience that paralysis gets well without treatment.

WEDNESDAY, APRIL 29TH.—SECOND DAY.

DR. R. J. NUNN, of Savannah, Ga., reported some

SUCCESSFUL RESULTS OF A NEW TREATMENT OF DIPHTHERIA.

He first referred to an article he had written on the efficiency of peroxide of hydrogen in removing diph-

theritic deposits, and then reported a case which died seventeen days after the successful removal of the membranes by that drug. From this he became convinced that the antiseptic treatment was necessary to combat successfully the destruction of the diphtheritic poison. From the table of Dr. S. Miguel, biniodide of mercury is found to be the most powerful germicide, being three times as powerful as the bichloride. A large quantity of the drug is not necessary. In the cultivation of the "aspergillus niger" 1 part in 1,600,000 of nitrate of silver added to the nutrient fluid stops the growth of the plant. Following these indications, a solution of 1 grain of biniodide of mercury to 4 ounces of a solution containing iodide of potassium is made, and 5 or 6 drops of this given every ten or fifteen minutes. If the membrane is thick, it is first acted upon by papayotin, to prepare it for the action of the peroxide of hydrogen, which is then facilitated very much. Papayotin is used in preference to pepsin, pancreatin, etc., because it acts equally well in acids as in alkaline solutions. To sum up the treatment, we have first, the frequent application, by spray or brush, of the peroxide of hydrogen. Then the parts are cleaned and papayotin blown on them, if they seem to need it; and thirdly, the biniodide is given in the doses above mentioned. A very small quantity of the drug is given, and it can be kept up for long periods without injury to the patient. He said nothing of stimulants and nourishment, but he gives them in large quantities. He also gives syrup of the iodide of iron when there is evident depravity of the blood. The iodide of potassium being highly diffusible, and possessing some antiseptic properties, as was evidenced by his having kept the urine of patients taking this remedy for months without the occurrence of decomposition, acts both as a germicide and vehicle. For this reason the strength of the solution of iodide should be as great as the comfort of the patient will permit.

The use of small doses frequently repeated is to insure a constant flow of the germicide through the system. Out of 14 cases treated last winter, there were 3 deaths, and these 3 cases were the only ones treated without the biniodide of mercury. In the first case the peroxide of hydrogen was used alone; in the second the treatment, as advanced in this paper, was used, except that the bichloride was prescribed instead of the biniodide; and in the third, which had been treated with chlorate of potash and tincture of iron, before being called into consultation, the peroxide of hydrogen and pepsin were used locally.

Dr. Nunn then gave the history of several successful cases illustrating his treatment. In none of these cases though some were severe, were there any sequelae. In one family he had been able to trace the origin of the disease to defective plumbing. Great stress must be laid upon the kind of mercurial treatment. The biniodide given in the manner described above, was much more efficacious than any other he had tried. This treatment was not offered as a specific, but simply as having been successful in the case mentioned, and, granting the germ theory in this disease, theoretically sound.

To summarize the treatment, it included: 1st. A blood antiseptic, which is also 2d. A local germicide. 3d. A

softening agent or digester of the membrane, and 4th. A solvent of the membrane.

DR. WALTER, of Little Rock, Arkansas, said the profession in his section had tried the biniodide of mercury, but had laid it aside. He had had very poor results from his treatment at first; later, with the use of tincture of iron and chlorate of potash and vaporized water, he had been more successful. He favored the expectant treatment, the main reliance being placed on stimulants and feeding.

DR. J. WEICHELBAUM, of Savannah, had used the same treatment as Dr. Nunn with great success.

DR. CATLIN, of Wisconsin, had used nearly all the remedies recommended for diphtheria except the present. Had had a great deal of experience. In one epidemic in his section of the country, there were some 500 or 600 cases in a total population of about 7000. Sometimes he never lost a case, at others he was not so successful. Epidemics varied very much in virulence. He commenced his treatment, generally, with a heavy dose of quinine, sometimes twenty grains. He followed this with a saturated solution of chlorate of potash and with tincture of iron. He depended largely upon stimulants and nourishment. He thought at one time he could always cure diphtheria. He was disabused of this, by losing 11 out of 14 cases in the same family.

In another epidemic he lost 8 cases out of about 150. His method of using chlorate of potash solution is to gargle and swallow a drachm afterwards. He had tried the bichloride without marked results.

DR. NANCE, of Illinois, had never seen a case recover after the voice had been suppressed. He asked Dr. Nunn how the peroxide of hydrogen acted.

DR. UPHAM, of Vermont, had seen a great deal of diphtheria since 1860. His experience with the disease had been sad, and he has no treatment he can unhesitatingly recommend. He has seen the most violent case suddenly take a turn for the better and recover. On the other hand, he has seen mild cases, apparently convalescent, drop down dead. He does not think too much alcohol can be given. He has seen a child take a pint and a half of whiskey in a day with good results. He treats this case as he would any other case of blood poisoning.

DR. HOLLIDAY, of New Orleans, thought the disease milder, as a rule, than formerly. Many cases lead to the belief that the disease is local; others conclusively disprove this. If the diphtheria can localize, the patient is apt to recover, with plenty of nourishment and stimulants. If it does not have that tendency, the symptoms of blood poisoning are severe and the progress to a fatal end generally rapid. He has seen cases recover after loss of voice had occurred, but this was, he thought, only when the aphonia was due to slight oedema of the larynx from its proximity to the inflamed surfaces. When the membranes invaded the larynx and trachea, he did not think there was any hope of recovery.

DR. NUNN, in conclusion, said that the peroxide of hydrogen acted as a solvent and disinfectant to the membranes. It was a harmless remedy and could be given to the parents to use *ad libitum*. He laid special stress on his method of using the biniodide in combination with iodide of potassium.

DR. L. DUNCAN BULKLEY, of New York, then read a paper on

REPEATED DOSES OF CASTOR OIL ESPECIALLY IN CERTAIN SKIN DISEASES IN CHILDREN.

He said that, though castor oil was a very old remedy, it had only been given in large single doses from time to time, or in very small doses continuously in emulsion for the relief of diarrhoea and dysentery. He thought he was the first to give it in doses of some size, daily, for any considerable period. The cases described in illustration of the treatment, had all been treated successfully with other remedies, and showed relapses when the treatment was left off too soon or through some negligence of the patient, and it was noted also that tonics and other remedies, which before had disagreed or proved inefficacious, became useful adjuvants to the treatment. Most of the cases were accompanied by torpor of the bowels and accumulation of feces in the colon, but some were benefited even when this was not the case. The doses were regulated so as not to produce purging.

The first case, one of chronic urticaria, in a child of six years, was given castor oil in teaspoonful doses once a day for one month, and for shorter periods on three other occasions. This, together with adjuvants of quinine, tonics, and lactopeptine, accomplished a cure, the disease having been exceedingly rebellious to remedies before. In a number of cases of infantile eczema the same treatment was used with great benefit, in one of these cases an accompanying ulcer of the cornea, which had resisted treatment in the hands of oculists, yielded in a remarkable manner.

Dr. Bulkley next reported a case of acne simplex and rosacea of several years' standing, complicated with ulceration of the cornea. The treatment was suggested by the success above recorded. The patient was twenty-six years old and took continuously two to four teaspoonfuls for something over a month, with great improvement. The treatment was continued sometime longer with the addition of tonics, with the happiest results. The next case, one of tonsillitis recurring monthly, was also successfully treated in the same manner. The treatment lasted six months.

These cases, together with a number of others, prove that castor oil in suitable doses may be taken with advantage, repeatedly, for a considerable period of time. The oil acts as a stimulant to the abdominal organs, the apparently tonic action being due largely to the improved absorption and assimilation. Many cases of urticaria and tonsillitis are due to reflex irritation from the intestinal tract, and are thus benefited by the oil. As to the administration of the oil, if a good quality is obtained and a lump of ice is held in the mouth before taking a dose, then wipe the mouth thoroughly so as to remove any oil that sticks to it, and finally take a drink of ice water. Thus administered, it is not a bad dose to take. The oil should not be mixed with coffee, whiskey, or anything else. Children often become fond of it. In conclusion, castor oil is not offered as a panacea for all evils; a great deal of the success in the cases mentioned was due to the medicine given with it. On the other hand, in certain conditions no remedy has been found to equal it.

MEDICAL ASSOCIATION OF MISSOURI.

Twenty-eighth Annual Meeting, held at St. Joseph, May 12, 13, and 14, 1885.

(Specially reported for THE MEDICAL NEWS.)

THE PRESIDENT, DR. H. H. MIDDLEKAMP, not having arrived, the Association was called to order by VICE-PRESIDENT W. E. EVANS, of Booneville. An address of welcome was delivered by Mayor Hartwig, and Dr. J. W. Heddens, in behalf of the local profession, tendered to the visitors an invitation to visit the various places of interest about the city. At the request of Dr. Evans, an appropriate response was made by Dr. Trader, of Sedalia.

On motion of Dr. Trader, it was resolved that a committee be appointed to prepare a memorial of the late Dr. P. V. Schenck.

The Association then adjourned until 2 P.M. At that hour Dr. Middlekamp took the Chair.

DR. J. W. TRADER, of Sedalia, presented a paper on CHLOERA.

Having made up his mind that hypodermic administration promised the best therapeutic results, he had prepared himself before the last cholera season with solutions of quinine, morphia, and atropia. He also had a glycerole of chloroform, and a glycerole of carbolic acid. He was called on to treat an elderly woman whose symptoms were so severe that he thought there was no hope of saving her life. He thought he would relieve her distress somewhat, and gave her a teaspoonful from one of his bottles. Soon she demanded to be told what he had given her, as she was sure that she was dying from the effects of it. On looking a second time he saw that he had given the glycerole of carbolic acid instead of the glycerole of chloroform as he intended. In a short time the woman became somewhat easier. The doctor left her, expecting nothing but death, but the next day he found her up and about, and apparently as well as ever. Since that time he had commonly made use of a mixture of the two glyceroles referred to with mint water in the treatment of cholera from diarrhoea.

In the discussion which followed, quite a number of members took part. All seemed to think well of hypodermic medication in this disease, but there was a difference of opinion to the value, prophylactic and curative, of germicide remedies.

DR. STRINGFELLOW, who saw much of the disease in 1849, then formed the opinion that large doses of calomel constituted the best treatment. Now he would favor the use of small doses of the bichloride as a prophylactic. He thought much was to be hoped for from prophylactic treatment.

DR. FISCHER called attention to the utterly unsettled state of the views of the advocates of the germ theory so far as it related to cholera, and called attention to the successful inoculations lately made in Spain. He also referred to the use of atropia by the late Dr. John. T. Hodgen in the collapse of cholera, as a means of tiding over the period of danger and giving the patient a further chance of life.

DR. PREWITT called attention to the fact that death does not usually occur in the course of the vomiting,

but after collapse, and that any remedy which will ward off collapse will be valuable in treating this disease. Collapse he compared to the shock following serious injuries, a vaso-motor paralysis. In his opinion, the hypodermic injection of morphia at an early stage gave most promise of successful results.

DR. TODD, of Kansas City, gave a brief exposition of his proposed treatment of cholera by the subcutaneous injections of large quantities of bland fluid which he calls artificial serum, and the administration of hot drinks in abundance, acidulated with sulphuric acid. No cold drinks are to be allowed.

DR. TRADER closed the discussion with the remark that he was disposed to attribute the successful result in his case to the anæsthetic effect of the carbolic acid rather than to any germicide action.

DR. J. C. MULHALL, of St. Louis, then read a paper on

ATROPHIC NASAL CATARRH,

or, as he preferred to call it, atrophic rhinitis. He claims that this disease is not a sequence of hypertrophic rhinitis, and does not believe that it is the consequence of severe colds in the head. He considers it to be of neurotic origin. A coryza in a child is not likely to become fetid unless there be a strumous condition. He defines struma as a condition of impaired vitality produced by some depreciated state of health in one or both parents when the child is begotten.

A coryza in an otherwise healthy child is readily contracted and speedily recovered from. The fetid coryza of atrophic rhinitis has no tendency to spontaneous recovery, and is not susceptible of cure. The treatment is only palliative, and consists in securing scrupulous cleanliness and constitutional tonic medication. He instructs the patient as to the use of the douche anteriorly and posteriorly.

DR. T. F. RUMBOLD, of St. Louis, took issue with several of Dr. Mulhall's statements. He claimed that atrophic rhinitis is *always* a sequel of the hypertrophic form of disease. He also asserted that the adjacent cavities are almost always involved, and that the crusts and discharges in the nasal passages are almost always derived from these other cavities. If these cavities can be reached with treatment, the disease can be cured.

DR. MULHALL said that the post-mortem researches of Zuckerkandel showed that the adjacent cavities are not involved in this form of disease.

DR. C. H. HUGHES, of St. Louis, Chairman of Committee on Psychological Medicine, then read a paper on
SOME NEGLECTED PRECURSORY SYMPTOMS OF CEREBRAL DISEASE,

noting various forms of altered nervous action, including the various forms of causeless fear.

EVENING SESSION.

DR. J. H. THOMPSON, presented the

REPORT OF THE COMMITTEE ON OPHTHALMOLOGY.

The special evidences of advance which he presented were facts concerning the use of jequirity and cocaine, and the treatment of glaucoma by the stretching of the infratrochlear nerve. He also noted with growing favor a tendency to discard large probes and cutting instruments, and the use of small probes in treating stricture of the lachrymal duct.

DR. F. J. LUTZ, of St. Louis, then read a paper concerning

DISEASES AND TREATMENT OF CICATRICES.

He related two cases, one of them being a case in which epitheliomatous degeneration of the cicatrix produced by a compound fracture of the tibia, had necessitated amputation of the leg. He exhibited the bone specimen. The other case was one in which he had operated for the relief of the deformity produced by an extensive burn involving a large part of the trunk, the upper half of the arm being bound down to the side of the thorax by the contraction of the cicatricial tissue. The result of the operation, as shown by the photographs presented, was a most satisfactory one.

DR. T. F. PREWITT, of St. Louis, stated that he had seen a number of cases in which epitheliomatous or sarcomatous degeneration had taken place in cicatricial tissues or in ulcers. He also spoke of the indebtedness of the profession to Dr. Post, of New York, for his teachings regarding the treatment of burn cicatrices, especially those causing deformity of the hands. He also related cases where he had relieved deformity of the face caused by cicatrices following wounds by means of subcutaneous incision, elevating the depressed point and bringing the cut surfaces into apposition by deep sutures.

DR. GEORGE HALLEY, of Kansas City, called attention to the more favorable prognosis in cases of epitheliomatous degeneration developing in cicatricial tissue over that developed in what would appear to be normal tissue.

Several speakers advocated early removal of epitheliomatous or scirrhus growths.

DR. J. W. JACKSON, of Sedalia, stated that he has operated a number of times for scirrhus mammae, and in every case the growth has returned. He did not state at what stage of development the operation was made.

DR. J. P. KINGSLEY, of St. Louis, then read a paper on

MALARIA IN CHILDREN,

basing his account upon personal observation of several hundred cases observed in dispensary and private practice. He had seen the disease in infants of only a few days; thinks the child may be affected by the milk nursed from a mother who is suffering from malarial poisoning. The diagnosis is often difficult in children; chill is slightly pronounced, sweating stage absent, cachexia develops early, enlargement of spleen is frequent. Sometimes there are irregular nervous symptoms. Quinine in doses of two or three grains three times a day, or to a child five years old five drops of Fowler's solution of arsenic three times a day, should be given. Where these are not well tolerated, he sometimes gives with advantage tincture of iodine and carbolic acid, and in some cases uses the cold wet pack.

DR. NELSON, of St. Louis, related the case of a child, two years old, with a spleen enlarged to such a degree as to extend from the border of the ribs to the crest of the ileum. Under the use of cinchonidia this was reduced to about normal dimensions in the course of ten days. He had used inunctions of quinine in fresh lard with good results in patients not over one year of age.

DR. F. M. JOHNSON, of Kansas City, did not credit the belief that little children do not have the chill. He thinks it does exist, but the child cannot describe his sensations.

DR. STRINGFELLOW was doubtful whether the little ones have malaria at all. He discarded quinine in treating infantile "malaria" some time ago, and now gives only small doses of calomel with most satisfactory results.

DR. SIMMONS thought that in cities and thickly settled country districts the chill is much less distinctly pronounced than in open country locations.

DR. FISCHER, of St. Louis, thought that a majority of the cases of fever in infancy which are usually regarded as malarial, and are treated with quinine, do far better under the use of small doses of calomel without any quinine.

WEDNESDAY, MAY 13TH.—SECOND DAY.

After the usual routine business, a committee was appointed to nominate officers for the ensuing year.

DR. CATLETT, of St. Joseph, read a paper on

THE ASYLUM TREATMENT OF THE INSANE.

DR. GRIFFITH, of Kansas City, then brought before the Society a lad of about fourteen years of age, who had suffered from

DEFORMITY AS THE RESULT OF MORBUS COXARIUS

since two years old. The thigh was flexed upon the abdomen and ankylosed, and the leg was flexed upon the thigh. Dr. Griffith had made a subcutaneous division of the thigh between the head and trochanter major, and after division of the hamstring tendons had straightened the limb and applied a plaster-of-Paris dressing. The result had been most satisfactory, the boy being able to walk about the room with only a cane, though generally using a crutch as well. A considerable amount of motion of the artificial joint was found.

DR. H. H. MIDDLEKAMP, of Warrenton, then delivered

THE PRESIDENTIAL ADDRESS.

He urged the importance of higher medical education, favored compulsory three-term schools, emphasized the responsibility of the general practitioner as a preceptor, recommended a State board of medical examiners, advocated the establishment of a medical library by the State Medical Association, and recommended the formation of a number of new standing committees.

A special committee of five was appointed to consider and report concerning these recommendations.

DR. HANNA then presented a report on behalf of the Committee on *Diseases of Children*, after which the Special Committee presented a fitting tribute to the memory of Dr. P. V. Schenck, which was adopted by a standing vote.

DR. B. F. WILSON, of Salisbury, read a paper on

TYPHOID FEVER.

He objects to direct antipyretic treatment, believing that the evolution of the increased amount of heat is a necessary part of the disease, and that attempts to prevent it are futile and tend to prolong the disease. In

some cases he gives calomel in the commencement of the disease. If there is a very marked variation in the temperature, he gives quinine, but the agents on which he specially depends are opium and alcohol.

DR. J. M. ALLEN, of Liberty, believed that the indications are to keep down the temperature, and "obviate the tendency to death." He thought the universally present tendency to cardiac failure should be met by the early and continued use of digitalis. He did not favor the use of large doses of quinine in these cases, but did advocate cold packing or a partial pack.

DR. G. M. DEVEY, of Keytesville, urged a milk diet and little or no medicine.

DR. RECORDS had tried the treatment with large doses of quinine, and thought the course of the disease had been prolonged thereby. He had come to rely almost entirely on a milk diet.

DR. O. D. FITZGERALD, of Lathrop, had read the article on Typhoid Fever in Ziemssen's *Encyclopaedia of Medicine*. In accordance with the views there advanced he had given large doses of quinine to typhoid fever patients. He was convinced that the quinine lowered the temperature of these patients, but the trouble was that "some of them stayed cool." He was satisfied that fatal results in some cases were referable to the medication. He was a strong advocate of "the cooling bath," putting the patient into a bath at a temperature of 100° F., and allowing it to cool down of itself for twenty minutes or half an hour. He opposed the use of opium, but used milk freely, peptonizing it if necessary; and thought digitalis dangerous to continue any length of time.

DR. HANNA advocated alcohol early in the disease.

DR. STRINGFELLOW urged the administration of salicylic acid.

DR. B. F. HART, of Brownsville, from the Committee on

COLLECTIVE INVESTIGATION OF DISEASE,

presented a report giving the results of an investigation with regard to pneumonia. This called out a very animated discussion in which a number of members participated.

DR. NELSON, of St. Louis, after a few remarks, offered a resolution that the Committee on State Medicine be requested to consider the urgent necessity of the establishment of an institution for the

CARE AND EDUCATION OF IDIOTIC OR FEEBLE-MINDED CHILDREN,

and the importance of the establishment of a central institution for the reception of the chronic and incurable insane, in order to relieve the pressure of overcrowding in the other institutions, and allow more systematic classification and more effective treatment. The resolution was adopted.

DR. A. J. STEELE, of the Subcommittee on

ORTHOPÆDIC SURGERY,

then read a report in which he presented his views with regard to the treatment of clubfoot and some other deformities, and exhibited some appliances which he has found serviceable in treating such cases.

DR. FUNKHOUSER, of St. Louis, then read a paper on

"THE DETERMINATION OF SEX."

He related the result of a large number of experi-

ments which he has performed on dogs, rabbits, and domestic fowls, all tending to demonstrate the truth of the view which he holds, viz., that the sex is dependent chiefly upon the testicles, and is little controlled by the ovary. He holds that an ovum impregnated with sperm from the right testicle will produce a male, one impregnated with sperm from the left testicle will produce a female.

Several members took part in the discussion, and several cases were related which would seem to oppose Dr. Funkhouser's theory.

PLACE OF NEXT MEETING.

On motion of DR. A. J. STEELE, it was voted to convene in St. Louis, at 10 A. M. of the Monday preceding the first day of meeting of the American Medical Association.

DR. BROOKES, of Carthage, then read an interesting paper in which he related his own extensive experience in the *Treatment of Injuries of the Larger Joints*.

The Association then went into an

ELECTION FOR PRESIDENT.

and after several ballots, Dr. G. C. Catlett, of St. Joseph, was declared elected, and the vote was immediately "made unanimous." This election will be eminently satisfactory to the profession throughout the State.

The Society then adjourned to the Pacific House, where

A BANQUET

was prepared, the members of the Association being entertained by the local profession and prominent citizens of St. Joseph.

THURSDAY, MAY 14TH.—THIRD DAY.

At the closing session, the Governor of the State was present and made a short complimentary address.

A report on the *Progress of Surgery*, by Dr. W. F. Walker, of Mexico, a paper on *Ovariectomy*, by Dr. J. U. Heddens, and a report on *Progress in Gynecology*, were read by title.

DR. D. H. SHIELDS, of Hannibal, of the Committee on State Medicine, made a verbal report as to

THE STATUS OF MEDICAL LEGISLATION

in the State, reviewing the action taken in regard to the State Board of Health, and explaining that the failure of the legislature to appropriate any fund for the Board was due to strong prejudice against the personnel of the Board as then constituted. He offered a resolution endorsing the law establishing a Board of Health, and urging the Governor to appoint representative men upon the Board.

THE REPORT OF THE COMMITTEE ON NOMINATIONS

was then presented and adopted.

Vice-President.—Dr. C. A. Todd, of St. Louis.

Recording Secretaries.—Drs. J. H. Thompson, of Kansas City, and J. C. Mulhall, of St. Louis.

Corresponding Secretary.—Dr. F. J. Lutz, of St. Louis.

Treasurer.—Dr. C. A. Thompson, of Jefferson City.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

Eighty-seventh Annual Meeting, held at Baltimore, May 12, 13, and 14, 1885.

(Specially reported for THE MEDICAL NEWS.)

WEDNESDAY, MAY 13TH.—SECOND DAY.

THE PRESIDENT introduced MRS. E. P. W. PACKARD, of Chicago, who, on motion, was allowed to address the meeting on the importance of the passage of

LAWS REGULATING THE TREATMENT OF THE INSANE.

Laws, similar to the one she advocated, exist in nineteen different States. The condition of the insane in our asylums is such that it becomes us, as humanitarians and philanthropists, to pay attention to it. We live in a republic; but the inmate of an insane asylum lives under an autocracy as much as if he were ruled by the Czar of Russia. The superintendent has absolute control over him; and however good the superintendents may be, the mere possession of such a power is dangerous, as it is so liable to abuse. Some persons who may be the victims of the jealousy, revenge, or of greed of others, may be incarcerated in the institutions established for the insane, and when there they are removed from the protection of the laws. This should not be so. These institutions being in a republic, should partake of the spirit of a republic and not resemble the Bastille. The inmates should be allowed, as citizens of the United States, their post office rights. At present there is a censorship over all letters written by the patients to their friends, or letters received by the patient. This is radically wrong. A sane person may be unable to communicate with the outside world, and so have no redress.

The law Mrs. Packard is urging, allows each inmate to choose one individual to whom he or she may write once a week without censorship. Mrs. Packard had visited Washington and obtained from the government assent to her proposition to allow a United States Post Office box to be placed in all asylums, public or private, in those States where this law was adopted. The patient is to choose the individual to whom these letters, that are exempt from inspection, shall be addressed; and the individual so chosen may be changed every three months. The reply of the individual is sacred from inspection. The envelope must have the name of the person sending it upon it so as to insure safety. These provisions are very simple, yet it allows just that means of communication with the outside world that is needed. Where censorship is practised over all letters, it is impossible for sane people, unjustly detained, to make their state known, or for persons who have been maltreated to complain. No letter of complaint will be allowed to go from the walls, nor will patients be discharged till their bruises have been healed. Such absolute power should not be in the hands of one man.

In Illinois, the first day after the law was in force, it was found that about one hundred persons were being wrongly imprisoned. In Maine there were between fifty and sixty in the same condition. This result was very startling, yet it showed how necessary this law is.

On motion, Mrs. Packard's suggestions were referred to a committee already appointed on the subject of

the insane, and a vote of thanks was passed for the address.

DR. ROBERT W. JOHNSON, from the Section on Surgery, read a paper on the

RECENT ADVANCES IN SURGERY.

He said that he would only treat of *some* of the advances made in this department, for the desire of the fame of new operations or procedures is so great among surgeons that the attempt to describe any considerable proportion of them would be impossible. He first referred to the local anæsthetic properties of the solution of muriate of cocaine, which is one of the most brilliant discoveries of the year. Not so much can be said of the new method of administering ether by means of the rectum. It is a method seldom required, and does not compare in ease and comfort to the inhaler. Chloroform has had its victims this year, yet in spite of this there are surgeons who still use it, though their own patients have died under its use. He expressed the opinion that any surgeon who henceforth uses chloroform, except in cases of obstetrics or where ether is not available, should be held responsible.

Passing on to the subject of surgical dressings, he spoke of the lessening popularity of the Lister spray, and of the still intense battle that is being waged between the advocates of various methods of dressing, there being but one point of unity and that being cleanliness. Hydrophobia is a disease that appears to be about to yield up its "baneful ghost" to science, owing to the experiments of Pasteur. The reporter thought that another decade might perhaps witness the bringing under control of zymotic diseases either by means of attenuated virus or by some germicide.

He then alluded to the operation of Godlee on a cerebral tumor, and spoke of the advance that had been made in our knowledge of the intracranial cavity. He concluded by reference to the operations on the thorax and abdomen. In the former, the aspirator is the most popular instrument. Resection for gangrene and drainage of tuberculous cavities has not met with promising success.

He advocated the use of disinfecting spray in all cases of laparotomy, on the ground that these were performed as a rule in general hospitals, where students and assistants have access, late from the dissecting-room or equally contagious surgical cases. Where the spray has been used, even where no restrictions have been put upon the attendants, the results have been most successful.

He passed in review Tait's operation of stone in the gall-duct, and the new operations for the permanent cure of hernia, which have yielded brilliant results, and closed with referring to the operation in this city for resection of the pylorus by Prof. R. Winslow, which ended fatally and the successful removal of a renal calculus, weighing 556 grains, by Prof. Tiffany.

DR. JNO. MORRIS, Chairman of Section on Obstetrics and Gynecology, reported on

GYNECOLOGY

under various heads.

Constitutional Treatment. There seems to be a turn in the tide in regard to this question. He referred to Drs. Albutt and Potter, who have but voiced the growing sentiment of the profession in regard to the immense

amount of local surgical and medical treatment of the womb. Nervous disorders are more common in women than in men, and the practice adopted by some of specially treating every slight displacement or leucorrhœa by local treatment is not only foolish, but positively injurious to the woman. Much more can be done by general treatment than many suppose, and, in any case, the practice of confining treatment to the uterus to the neglect of constitutional treatment is becoming more and more condemned.

Pessaries. He condemned pessaries. Ten years since he read a paper, then deemed heterodox, before the American Medical Association, taking this ground. He thinks now that opinion is coming round to his side, and he referred to Dr. Bigelow's recent paper on the subject. The pessaries distend the vagina and injure its power of supporting the womb; they act as foreign bodies and set up irritation. They often cause tenesmus; they have produced much harm and little good. All the good effects produced by them can be fulfilled by cotton tampons. These adapt themselves to curves and position, and will not interfere with any of nature's laws, and are consequently scientific appliances.

Incision of the Cervix Uteri and the Use of Tents. These procedures are falling somewhat into disrepute as dangerous. As a substitute for them, Dr. Morris described Dr. Wm. Goodell's operation of rapid dilatation, which he much praised. His opinion, however, was that the plan of performing the dilatation at one sitting was too severe and harsh. He would suggest a longer time being taken and that the dilatation be carried on at successive visits. This gradual procedure would necessitate dilators of various sizes.

Emmet's Operation for Lacerated Cervix. This has met with very little acceptance and is now fallen into disfavor. Very injurious consequences have followed from it, as cellulitis, hemorrhage, sterility. Even Emmet has felt it necessary to discourage its indiscriminate use. Dr. Morris hoped that in future greater conservatism would be exercised in this as in other gynecological procedures.

Lacerations of the Urethra. Dr. Morris entirely condemned Dr. Emmet's suggestion of a "buttonhole" operation for the diagnosis of this accident. If it be suspected, much simpler measures will suffice for its detection.

Operations for Lacerated Perineum. The operations heretofore in use have been on the whole unsatisfactory. He described Emmet's and Schmidtman's operations, both of which he approved, especially the latter.

The Alexander-Adams Operation on the Round Ligaments. After describing this operation he continued: "In the opinion of your reporter this operation is not only useless but unjustifiable. It is the outgrowth of a morbid desire for gynecological novelties which appears to be increasing every year." Some benefit may accrue if there be no adhesions, but the diseased state cannot be remedied, and it must ultimately prove a dangerous operation.

Extirpation of the Uterus for Cancer. The weight of evidence for this operation, which has occasioned so much thoughtful inquiry and discussion during the past year, has been by no means favorable to it. In 137 cases where this has been performed by abdominal sec-

tion 72 per cent. died; of the 276 cases by the vaginal method, 28.6 per cent. died. While better results for the future by the methods employed by Olshausen and Schröder may be expected, the present conclusion is that for cancer of the cervix the operation is entirely unjustifiable, while for cancer of the body its justifiability is doubtful.

Extra-uterine Pregnancy. Through Lawson Tait and Prof. Freunde and others our clinical knowledge of this condition has much increased. After discussing the various views held by the observers mentioned, he said that the general opinion of the profession is that operation should not be undertaken at the time of the rupture of the sac, but be postponed till after recovery from the shock.

For the purpose of destroying the foetus electricity has been used with great success. It must be employed before the termination of the third month of pregnancy. It not only kills the foetus but produces its absorption. For the first, the faradic, for the second the galvanic current should be used. One electrode in the vagina is to be applied to the uterus and the other over the hypogastrium.

Therapeutics in Gynecology. Muriate of cocaine affords relief in vaginismus, but it is only temporary. It promises to be, however, a valuable local anæsthetic in gynecological operations. The permanganate of potash has been recommended as an emmenagogue, but it has not yet been verified. Dr. Morris thinks ergot to be the only drug that acts specifically on the uterus. Iodoform is undoubtedly a valuable agent in uterine surgery. It can be used in solution, with ether or carbolic acid and glycerine, or in slender crayons made with gum, and introduced into the cervical canal. Several deaths have occurred during the year from intra-uterine injections of bichloride of mercury. This remedy is dangerous when kidney complications exist.

DR. L. E. NEALE, of the same Section, then gave a lengthy and interesting report on

OBSTETRICS.

He spoke of the advances made in this branch during the year, and began by citing Tarnier's communication on "Combined Turning in the Treatment of Placenta Prævia." Statistics of results in this condition show a high mortality when other measure are employed. The ordinary death-rate is twenty-four per cent.; while the very best are twenty-two and a half per cent. The statistics of this method, which was introduced by Braxton Hicks, in 1860, show a mortality of four and a half per cent. in the hands of a good operator, and even if we take the worst possible showing, including cases where previous measures had been undertaken, the mortality is still only ten per cent. In view of these facts it seems wonderful that it is not more generally practised. He then gave a minute and clear description of the method, and then summed up as follows the advantages of combined version:

1. It does away with the tampon, and with the dangers of infection and loss of time this involves.
2. It allows us to operate early, *i. e.*, when not much blood has been lost.
3. It arrests hemorrhage with great certainty.
4. It gives the patient time to rally, gives time for the cervix to dilate, for pain to set in. It, therefore, prevents post-partum hemorrhage, laceration of the cervix,

atony of the uterus. The operation rests upon solid experience and not upon mere theory.

The use of the tampon should be restricted to cases where the os is undilatable, and then its use is only temporary. Of course, the combined method is not applicable to all cases, such as when the child is fixed in the strait and the labor pains are severe. Again there are times when the child is in the transverse position and the labor is somewhat advanced, where this method cannot be employed, and where destruction of the child is necessary. In regard to the child, clinical results show that the prognosis in the combined method is no worse—indeed, a shade better—than with other plans of treatment.

Dr. Neale reported a case of placenta prævia which had occurred in his practice during the year. The woman, a German emigrant, after having suffered a considerable hemorrhage on shipboard some twelve hours previously, entered the hospital. Examination revealed a dead foetus *in utero*, membranes ruptured, waters escaped, placenta partially torn away, and os readily admitting the hand. Internal podalic version and extraction were performed, the intrauterine douche administered. Rapid and uninterrupted recovery followed.

The speaker then turned his attention to the obstetric forceps. After referring to the mania for "improving" them, he said that Simpson's forceps are the ones most used abroad, and that they are gaining in favor in this country. There are a certain number of cases, however, where the head is impacted in the pelvis brim, where Simpson's, or, in fact, any forceps except Tarnier's, are dangerous and impracticable. These last represent the first successful attempt to assist the efforts of nature by traction, with an instrument, with safety to the soft parts in the direction of the axis of the superior strait. The disadvantages of Tarnier's forceps are: 1, unwieldiness and complexity; 2, liability to lacerate the soft parts. Some have taught that when the head has been brought down to the inferior strait, they should be removed and Simpson's forceps substituted. Others, including Prof. William T. Howard, of this city, have urged that with care Tarnier's would complete the delivery with safety to the mother's soft parts. Some say that Tarnier's allows too great liberty to the head to rotate unfavorably, forgetting Tarnier's direction to make pressure with the fingers of one hand in the desired direction upon one handle of the introduced blades, while steady traction was being performed by the other hand. Again the objection has been urged that it necessitates two instruments—Simpson's for simple and Tarnier's for more difficult labors.

To meet these objections, Dr. Neal presented an instrument of his own, which he said combined the excellences of both in such a way that one instrument only would be necessary in either class of cases. The points of this instrument are as follows:

1. We have Simpson's forceps practically unaltered.
2. The Tarnier axis traction rod to be used or not at the option of the operator.
3. By removing the compression screw and the handle to the traction rods, when the head is low down, without removing the forceps from the head, delivery may be completed by the unaltered Simpson, thereby subjecting the perineum to as little risk as possible.

4. By employing the fixation bar concealed in the handle to the traction rods, rotation may be governed (so far as lies in the power of the operator with any instrument), without touching the handles of the introduced blades, thus allowing them to act as an index by which we can determine the position of the head.

5. Compression by the screw may be instantaneously varied at option.

6. The instrument combines in the least complex and most practical manner the two principal forceps of the present day, viz.: The Simpson and the Tarnier, giving us either one or the other in the same forceps as desired.

Dr. Neale demonstrated the use of these forceps on a manikin and afterward the instrument, was passed around for examination. The traction rods are secured to the Simpson blades behind the fenestræ by means of a buttonhole joint. He then showed or described several instruments used abroad in obstetric practice. Among these was a glass tube for intrauterine douche upon the puerpera. It is a simple glass tube with a bulbous extremity and a constricted neck to allow free escape of the injected fluid. It has a sigmoid flexure which not only facilitates its introduction, but prevents its being inserted too far. Being glass, it is cheap and easily cleaned.

He then proceeded to explain Schultze's method of artificial respiration in the asphyxia of the newly born. He described a case in his own practice in which, after trying Marshall Hall's, Sylvester's, and other methods in vain, he succeeded in this after ten minutes.

The entire procedure is divided into two acts of inspiration and expiration, with a rest after each.

Grasp the child firmly by the shoulders—the thumbs being placed in front of them and the forefinger just behind the shoulder, and the three remaining fingers over the shoulder-blade. Stand with your legs conveniently apart, and thus hold the child. The position now will correspond to the inspiration as the chest is expanded by the child being held by his shoulders.

1. Rapidly elevate the child at arm's length as the body is correspondingly erected until the arms are about at right angles to the body or somewhat above the horizontal. Then suddenly stop the upward movement in such a manner as to cause the child to fall together upon itself, while the thumbs support the weight of its body by pressure upon the anterior thoracic walls. This corresponds to the rest or pause after complete expiration, during which time fluids, mucus, etc., may escape by gravity, from the respiratory passages.

2. Now, lessening the thumb pressure on the chest and hooking the thumbs over the front of the shoulders, the child is *rapidly slung forwards and downwards* into the first position. And so the regular respiratory movements should continue in systematic manner until the object is accomplished or the case prove fatal.

Dr. Neale then reported two cases of post-partum spontaneous expulsion of submucous non-pedunculated uterine fibroids. The first was discharged twelve hours after delivery; the second on the eighth day. The Doctor said he had not been able to find any mention of such cases in English text-books, and only most cursory notices by foreign authors.

He closed his report by speaking of abdominal palpation as a means of diagnosis in the physical exploration

of the pregnant female, a method too much neglected in this country. He illustrated its application upon a manikin.

THURSDAY, MAY 14TH.—THIRD DAY.

DR. JOHN S. LYNCH, Chairman of the Section on Practice, reported his

EXPERIENCE WITH ANTIPYRIN IN FEVERS.

His attention had been called to this drug during the past year. He regards it as one of the most important therapeutic agents recently given to the profession, almost equal to quinine in its value. Its chief action is upon the temperature of the body, and this action is almost certain. His first trial of it was in the case of one of our colleagues, Dr. Kinnemon, whose death occurred during the latter part of last year. He was suffering from phthisis, and all the usual medicines employed to check the rise in the temperature had proving unavailing. After a great deal of difficulty he procured some antipyrin and tried it on him with the result of at once lowering the temperature and improving the condition of the patient. He has no doubt that had he been able to obtain antipyrin longer this patient's life would have been much prolonged. He said he had used it in a number of similar cases with constant effect. In rheumatism it is fully as efficacious in his hands as salicylic acid; he has used it in dysentery and in a great number of febrile affections. He regards it as a perfectly safe remedy. The only disagreeable effects which he has noticed are that it sometimes causes nausea, and that the first dose will sometimes give rise to profuse sweating. The former is readily controlled by suspending the drug and it is a curious fact in regard to the latter that the sweating is only brought on by the first dose. The subsequent doses are fully as effective in lowering the temperature but they do not cause the sweating. He was more ready to call attention to this drug, as he believed it was not in general use among the profession. The chief objection to the drug is its expense. As it is a product of coal-tar, and made from what was formerly considered to be refuse matter there is no doubt that it will come down in price after awhile. The dose of the drug is about seven and a half grains, and may be increased to fifteen grains.

DR. R. H. THOMAS said that his experience with antipyrin was very limited, but he had for about eighteen months been using kairin in cases similar to those mentioned by Dr. Lynch. Kairin acted well in much smaller doses than was recommended by European journals. He had found five to ten grains sufficient if given hourly. Kairin is a drug that must be carefully watched, as if continued too long it will cause too great depression of the system. His rule is to give it in five to ten grain doses every hour, having the temperature watched, and to stop it as soon as the temperature reaches 99°. The effect can then be continued by quinine. This can be done even when quinine has failed to produce effect before. If used in this way with care, he has learned to regard it as a valuable and reliable antipyretic.

DR. R. WINSLOW said he had used kairin in but one case. It then reduced the temperature, but brought on very alarming depression. He would certainly only use kairin where there was a nurse who could watch the temperature.

DR. LYNCH had used kairin in one case in two grain doses hourly without effect. He was surprised to hear that Dr. Thomas had success with it in such small doses.

DR. THOMAS said he had been surprised also, but the fact remained. He had once seen two grains effective in an adult, but only once. Most of the cases in which he had used five grain doses were under 20 years of age. He did not remember to have ever given over ten grains at a dose.

DR. D. W. CATHELL, read a volunteer paper on

RECTAL MEDICATION.

He spoke first on the rectum as an absorbing cavity and then said that he would confine his remarks to the use of morphia and belladonna in this way. He does not use medication per rectum in preference to the usual method by the mouth, but a number of cases arise where the stomach should be left at rest to perform its proper digestive functions, and yet where drugs are needed by the system. His favorite method of administering the drugs in question is to give them combined. The combination seems to unite all the good qualities of the two drugs and to lessen the unpleasant effects of each. He referred to a number of cases in which he had used these remedies together in this way, such as, "ulceration of the prostate gland" where after long agony the relief under this method began to be observed at once; vesical tenesmus; senile hypertrophy of the prostate gland, when the patient from being obliged to rise every hour during the night for micturition was enabled to sleep all night without disturbance; encysted renal calculus; vaginismus; subacute sciatica; dysentery and irritable rectum, etc. In order for the suppositories to have effect, they must be prepared carefully and accurately. The excipient preferred by himself is glycerine jelly. But where the suppositories are to be kept for a considerable time he used oleum theobroma. This last keeps fresh for a very long time and does not grease. It is often adulterated with wax, which renders the medicines contained in the suppository inefficacious. The fact, however, that the suppository is found in the dejections undissolved, provided it has been made of cocoa butter, does not mean that it has not yielded up its contained medicine, as, since it is a vegetable fat, it is able to do this without being dissolved. His own experience had shown him the truth of this. The size of the suppositories he uses is fifteen grains. The question arises whether medicine administered per rectum in capsules would not be better. He is rather inclined to favor them, as there are manifest advantages in favor of the capsule, such as cheapness, accuracy, and the exclusion of air from the drug. He generally gives the medicine once in six hours. He prefers morphia to opium and the watery extract of belladonna to the alcoholic, the usual dose being one-fourth to one-sixth of a grain of morphia and one-half of a grain of belladonna.

DR. WILLIAM BRINTON read a paper on

THE GERM THEORY OF DISEASE,

in which he discussed the question in regard to cholera, syphilis, and other diseases. He said that there seemed some likelihood that Virchow's sarcastic remark, *Es gibt nichts als Pilsen in die Pathologie*, would soon become

established as the real belief of the profession. He entered into the experiments of Koch and others, and passed in review the investigations that have been undertaken to establish or disprove the germ theories of the various diseases. The conclusion arrived at by the reporter was that though there is a great deal going to support the theories in question, and though the theory is not only a convenient but apparently a logical one, it must still be held as a matter of doubt whether it has been established.

DR. F. DONALDSON, SR., read a paper on

THE USE OF THE MURIATE OF COCAINE IN DISEASES OF NOSE AND THROAT.

He claimed that laryngologists were the first to use cocaine as a local anæsthetic. He himself has been using it since it was first brought to the notice of the profession last autumn. He has been using it almost daily as a local anæsthetic. He has found it anæsthetizes the nasal tissue in all painful operations on them and on the throat. He has used it also in rhinitis with satisfactory results. It enables the rhinoscopist to examine the posterior nares, and its application so contracts the nasal tissue as to enable the observer to examine with ease the deeper tissues of the nose from the front, and to locate morbid growths with greater accuracy. He regards it also as a valuable hæmostatic. He employs it generally in strength varying from two to six per cent.

DR. JOHN N. MACKENZIE and DR. R. H. THOMAS in the main expressed similar views, the former denying its hæmostatic properties.

FRIDAY, MAY 15TH.—FOURTH DAY.

DR. W. C. VAN BIBBER, Chairman of the Section on Sanitary Science and Hygiene, presented a report in which he considered

THE TONIC EFFECTS OF TRAVEL.

Tone in its primary signification is tension, and tension primarily means strength, hence its application to the natural healthy state of the animal organs. It, therefore, means in medicine that strength and activity of the organs from which proceeds healthy function. Travel is supposed to benefit chiefly from change of air. Its real benefit is, in fact, from the entire change to both mind and body which the present quick mode of travel allows. This rapid change is altogether modern. In 1845 it took thirty-eight to forty days to go to New Orleans from Baltimore. Now it is made in as many hours. It is possible in the winter time to leave the snows in Baltimore and Washington and be eating oranges in Florida in twenty-six hours. The question arises, Is the sudden change as desirable as a more slow transition? For the *real* invalid the slower mode is the preferable, but there are conditions where the excitement caused by the rapid change of scene is of great benefit. The same question can be asked in regard to the transition from warm to cool atmospheres, as in the case of children in summer. Whether the change be sudden or not must depend upon the individual case. There are times when from weakness, etc., the patient cannot stand rapid travelling. The great advantages of this change are seen in numerous instances every summer.

DR. GEO. H. ROHÉ read a paper entitled

THE NON-NECESSITY OF ANY RADICAL CHANGE IN THE
PRESENT SYSTEM OF DISPOSAL OF THE DEAD.

Incineration has been proposed as a remedy for certain admitted evils connected with interment. Is cremation really unobjectionable? It is said that decaying bodies pollute the soil and contaminate the ground water and ground air, and that hence we have unhygienic conditions and positive disease. There is, however, very little trustworthy evidence for this; the examples brought forward are not conclusive. Smolensky found that the percentage of carbon dioxide in the ground air is less than half of that found in the soil used for deposit of offal. Note the generally observed good health of workmen in cemeteries, and note their own testimony to this. Experiments show that microorganisms are not moved by air currents if attached to a moist surface. Hence, the difficulty of conveying germs from a decaying cadaver. Water from wells near cemeteries as a rule is of equal purity to that obtained from places inhabited by human beings and where the soil is more or less polluted. Note the absence of special tendency to disease in those who constantly drink such water. There are no trustworthy observations on record to justify us in saying that infectious diseases may be communicated through the air, water, or soil, polluted by corpses of those dead with the disease. Most of the observations leading to such a conclusion lack accuracy and are, therefore, unreliable. He was prepared to maintain that the greatest violence of the yellow fever epidemic in Savannah, in 1876, in Memphis and New Orleans, in 1878 and '79, was not in the vicinity of the cemeteries. People say it would be more economical to cremate; this is absurd, the cost is what people chose to make it. The cost of reaching the cemetery is an incidental item and cannot be included in the total. A brief calculation shows the fallacy of the plea that in epidemics burning is a more rapid and effectual way of disposing of the dead than burial. The average number of deaths in Baltimore daily is less than 23; for this four cremation furnaces would be needed. Suppose an epidemic of cholera and a death rate of 100 per diem, would it be possible to reduce all these bodies to ashes in the four furnaces? Would a community sink funds to prepare for such a contingency when they might or might not be used? The supposed advantages of cremation in time of war were disproved at Sedan.

The objections to cremation are: (1) In cases of criminal poisoning cremation would destroy all evidence of crime. (2) The overwhelming majority of people cling to old customs and are shocked at cremation. There may be poetry in the funeral pyre, but not much in a furnace blast fired up like the blast in a foundry.

After summing up the above points, Dr. Rohé said he did not intend to seem to approve of violations of sanitary laws so frequently met in cemeteries. They should be kept strictly under supervision, guided by a proper code of sanitary regulations, and all infractions of these should be promptly punished. Intramural cemeteries are objectionable, but when bodies are buried in suitable soil, their decay goes on rapidly and without giving rise to offensive emanations.

DR. JOHN MORRIS said that Dr. Rohé's views were not new. The same kind of objections were urged

against all new improvements. He was surprised that Dr. Rohé should have been so dogmatic, especially as Dr. Formento at the Public Health Association had so abundantly refuted Dr. Rohé's statement that there was no evidence that graveyards favored the spread of epidemics. Again, the testimony of workmen to the healthfulness of their trade is worthless. Those who work in the most disgusting trades will testify they are healthful. He spoke of a recent analysis of water in the vicinity of Greenmount Cemetery, which showed it to be loaded with nitrates. The expense is a secondary question. We want to have the hygienic needs met. Cremation is certainly the method in epidemics. He spoke of the blistering corpses he had seen, years ago, in Norfolk, Va., during a yellow-fever epidemic. Cremation was found to be a necessity in the Franco-Prussian war.

DR. JAS. CAREY THOMAS read a paper on the importance of the

STUDY OF HYGIENE IN MEDICAL SCHOOLS.

Preventive medicine is now taking the place it occupied in the older civilizations—in the foremost ranks of medical inquiry. A tablet of old was raised, dedicated to Æsculapius and Health. We now reverse the motto, and read, "*Sanitate et Æsculapio*." It is of the greatest importance that physicians should be able to advise district and municipal authorities on matters of public health as well as to study the constitution, habits, and surroundings of the families and individuals committed to their care, so as to prevent such sickness as is preventable. He instanced the epidemic at Plymouth as the example of the result of neglecting sanitary precautions. A movement is on foot to introduce physiological and hygienic study in the public schools, and it is important that physicians should be able to keep in advance of the growing public intelligence on the subject. The schedule of the Illinois State Board of Health requires hygiene as among the "minimum requirements of a medical college to be held in good standing."

DR. JOSEPH T. SMITH, in discussing this paper, said that it and Dr. Rohé's paper on cremation went together. As soon as public opinion is educated to look at these questions from a rational point of view, the main objections to cremation will cease. The fact that the germs of disease show such wonderful vitality lends much support to the theory that one cause of the virulence of epidemics is partly, at least, caused by the custom of burial.

DR. J. S. CONRAD, Chairman of the Section on Psychology reported. He spoke of the alarming increase

IN INSANITY

in this country, and entered rather minutely into the statistics of Mr. Wines on this subject in the census for 1880. The increase appears to be going on, and everywhere there is a call for increased accommodations for the insane. What is to be done with the present rapidly accumulating number of the insane, is a question which demands our attention. Legislation in New York has provided for the separation of acute from chronic cases. Owing to the rapid accumulation of chronic cases this law has been only partly carried out. The objection to the association of the two classes is that the duties of the officers and attendants is so tax'd by the chronic patients that they have not the proper amount of time

in which to attend to the acute cases. The subordinate staff of an insane asylum are taxed beyond endurance, hence neglect on their part, naturally resulting from the present system. Let the acute be separated from the chronic cases. This is the remedy. Let these receive the kind of care they need. Let cheaper accommodation be provided for the chronic cases, who need chiefly custodial supervision. Let there be one or more State hospitals for acute cases exclusively. The pressure at present upon the superintendents is such that they have to leave the treatment largely in the hands of untrained young men—the assistants. These, as well as nurses, are likewise selected largely by political preferment.

Another difficulty is the almost complete absence of any systematic study of pathology of brain diseases. Only one State hospital (at Utica) has made any provision for this study. Forty thousand patients ought to furnish a large field for observation, yet it is all lost.

Dr. Conrad then continued to consider the status of the medical profession in relation to insanity. He spoke of the fact that the subject is not taught in our schools, and that few had read systematic treatises on the subject. How could you expect such a person to be acquainted with the subject? Yet, though he knows no more than a layman, he will curl his lip at the opinion of such a one in the case of a man suspected of insanity. He does not know the difference between an hallucination in acute mania and in melancholia.

Dr. Conrad then made a supplementary report, which consisted of a reply to Mrs. Packard's remarks in the second day's session. Mrs. Packard's assertion that there were persons unlawfully detained in our asylums, is supported only on her own statement. Dr. Kirkbride, who had treated over 10,000 patients, said that no case of improper confinement had ever come under his notice. In a discussion the unanimous opinion of physicians representing 50,000 patients was the same. It is all right to have post office boxes in asylums, but letters should be inspected by Board of Managers. He adduced many instances of those whom the public and juries considered sane, whose after conduct proved the contrary. The unlimited privilege of correspondence with friends and others is most objectionable, as the patients continually expose themselves, and use obscene language, etc. The proper suppression of correspondence is a protection to the patients themselves. The charge that the sane are kept for years from their friends is made out of whole cloth. Does Mrs. Packard forget the habeas corpus act, and the government of asylums? He read a report of Dr. Earle's (Mass.) showing that in ten years in that asylum the letter box privilege had not brought out one case of unjust treatment.

DR. R. H. THOMAS reminded the Faculty that Mrs. Packard had made no charge against the asylums in Maryland, had not asked for unrestricted powers of correspondence between the insane and their friends, but only that each patient should be allowed to write one letter a week to one person only, without censorship. Dr. Earle's report only showed that good superintendents had nothing to fear. She had said that the arrangement had resulted in the liberation of a number of inmates in Illinois and Maine. The objection to the present system in Maryland is the possession of unrestricted power by the superintendents.

DR. GUNDRY remarked how readily attacks are

made on medical schools and hospitals for the insane. To-day both seemed under fire. The last speaker stated that once upon a time in Illinois upon the enactment of a certain law it was discovered that 149 persons were improperly kept as sane persons in an asylum, and that the Committee on Buildings was discharged as unnecessary. His recollections did not agree with these statements. In 1866 or 1867 the law requiring jury trials in every case was enforced, and those cases that had been admitted under a former law were discharged to undergo the required formality. Also that if building asylums had been suspended, it was only for a short time. Since that date two asylums had been opened and one was now being finished at Kankakee, to accommodate 1200 patients. Dr. Gundry thought that while there were some things to criticise in Mrs. Packard's address, he did not care to notice them. It was well to have the attention of the medical profession called to the condition and wants of the insane. Mrs. Packard's proposed law would hardly meet the case, he thought. Better far have the correspondence held sacred between every patient and some designated official person. Such a person visiting the asylum would soon find out whether his correspondence was suppressed. Dr. Gundry had for twenty years been in the habit of sending all letters directed to patients unopened, but not all letters from them. He would offer three suggestions: 1. To secure some plan by which a patient could be placed in a hospital without delay, but with proper safeguards of judicial care and professional opinion. Each case should be registered. 2. Some general agency such as State Board of Charities should have the right to visit them. This general agency should have no power to order changes, but simply to inspect. 3. The medical profession should aid the work by their influence in providing for those not provided for of the insane, and especially for the separation of the idiotic from the insane. The number unprovided for is very great.

DR. J. C. THOMAS agreed in the main with Dr. Gundry. Wherever irresponsible authority exists it should be under some proper control. The common sense of the community demands this. As to Dr. Conrad's charge against the profession, his supplementary report disproved it. What higher testimony to the ability of the profession could be found than the testimony of Dr. Conrad, who had said that there had been no case shown where a person had been unjustly sent to an insane asylum.

DR. R. WINSLOW read a carefully and judiciously prepared paper on the advantages and disadvantages of

LAPAROTOMY FOR GUNSHOT AND PERFORATING WOUNDS OF THE ABDOMEN.

He reported a number of cases from his own practice. In none of these had it seemed to him that abdominal section was advisable. The post-mortem appearances in the cases that had died had justified his decision, except in one case, where there was a bare possibility that the patient might have recovered had an exploratory incision been made. The most remarkable case he reported, was that of a woman who lived five days with a gunshot wound perforating the abdominal aorta. He reported cases where, under the conservative plan of treatment, the lives of several patients very seriously

injured by perforating wounds in the abdomen recovered. His conclusions were, that abdominal section is sometimes indicated, but unless it is very clearly, the conservative plan (opium, etc.) should be pursued, as, on the whole, offering the best chances for success. At the same time, he did not at all condemn the practice when it is clearly indicated.

DR. J. N. MACKENZIE made some

OBSERVATIONS ON THE ORIGIN AND CURE OF THE DISEASE CALLED "HAY ASTHMA" (CORYZA VASO-MOTORIA PERIODICA).

Ignorance of intranasal pathology on the part of those investigating the complaint, false theories, and especially the pollen theory, have by drawing attention to less essential conditions, been barriers to therapeutic progress and have contributed to the sufferings of the patient. After criticising the various theories on the subject, Dr. Mackenzie proceeded to show that the disease, hay fever, is no new affection, but has descended through the centuries under the guise of the convulsive asthma and nervous coryza of the older writers and nosologists, and that the so-called idiosyncratic influence in its production may be traced in all probability to the time of Galen. Dr. Mackenzie does not regard the disease as an affection of any particular country or confined to any condition of mankind. According to his conception, the affection commonly known as "hay fever" is simply a grouping together of certain prominent and frequent symptoms of a particular form of nasal inflammation to which he has given the name "rhinitis sympathetica," characterized by a peculiar excitability of the nasal cavernous tissue possibly linked to an exalted state of the nerve-centres (see abstract in *Md. Med. Journ.*, April 11, 1885, also on pathology of the affection, *Trans. Amer. Laryngol. Assoc.*, 1884, p. 113, *N. Y. Med. Rec.*, July 19, October 18, 1884). For the intelligent treatment of such cases, certain principles should be borne in mind which underlie the etiology and mechanism of the paroxysms. It should be borne in mind that the excitability of the turbinated tissue is a secondary phenomenon dependent, as a rule, upon a direct impression made upon the sensitive nerves of the mucous membrane and upon the terminal filaments of the olfactory; or an indirect influence conveyed or reflected through the vaso-motor centres from a distant organ, or finally from some excitation starting in the centres themselves. This stimulation of the nerve-centres from whatever cause originating is reflected outward probably through the sympathetic filaments which reach the turbinated structures with the sphenopalatine nerves. Now as these nerves are distributed over the posterior and inferior portions of the nasal fossæ (sensitive reflex area), the turgescence of the erectile tissue is most noticeable over this particular area, and it will be found that this surface represents the most sensitive spot to the reflex-producing impression. Destruction of the terminal filaments of the sensitive nerves accomplishes thus one result, it closes one door against *ab extra* irritation of the nerve-centres. In order to exclude completely the influence of the latter, it is necessary in addition to remove all sources of local irritation, from whatsoever cause originating. In this way the production of paroxysms from external agents acting directly on the mucous membranes is prevented. The

above means alone are obviously insufficient to protect from paroxysms due to agencies operating within the organism, or from reflected irritation from other parts of the body. The indication here is to remove the cause and diminish or abolish the reflex excitability of the erectile tissue—mark it, not to produce artificial contraction of its muscular elements, whose inevitable result will be permanent weakening and dilatation of the intercellular walls, but so as to alter the nutrition of the nerve-centres that they may not respond so easily to impressions which awaken reflex. Failing in the above methods, the destruction of the cavernous tissue should be undertaken. In the majority of cases it is neither necessary nor advisable to destroy large portions of the cavernous bodies; the amount to be sacrificed depends upon the exigencies of the particular case. Dr. Mackenzie does not usually wait for the interregnum of immunity, but operates between the paroxysms, and by this means has succeeded in preventing their return, when the individual has been exposed to the exciting causes of the paroxysm. He makes a stellate incision with the cautery knife in the tissue to be removed, the advantage of which resides in the resulting cicatrix and the greater patency of the nostril secured therefrom.

The prognosis depends not only upon the special predisposing and exciting causes of the disease, and the facility of their removal, but also upon the amount of structural injury done to the respiratory organs, to the central nervous system, and to the parts of the body subjected to the reflex disturbances, to which the frequency of the paroxysms has led. In general it is good, relief can always be secured, and in a fair proportion of cases a cure may be effected.

Dr. Mackenzie related the case of a clergyman out of whose right sinus pyriformis he had extracted a large pedunculated fibrous growth. The growth was very difficult to reach. He had to make the patient gag, and catch it with a pair of forceps, and then pass a wire snare over the handles of the forceps, and so secure the growth. Muriate of cocaine was used, no pain and hardly any hemorrhage, though not much cocaine was used for fear of hemorrhage into the anesthetized larynx.

SATURDAY, MAY 16TH.—FIFTH DAY.

DR. CHARLES O'DONOVAN, JR., read a paper reporting five cases of

OVIARTOMY

that had been performed by Dr. Howard.

This paper related in full five cases of ovariectomy that occurred in the service of Prof. Wm. T. Howard at the Hospital for Women, resulting in four successes and one death; together with a minutely accurate account of Prof. Howard's method of performing ovariectomy and his treatment after the operation. Two of the cases were very interesting. The first was of a girl thirteen years old, in whom menstruation had not yet occurred, from whom were removed a teratoma of each ovary, weighing respectively 7.7 lbs. and 1 lb. 6 oz. These had developed in four months.

The second was a case of cystoma of the right ovary, complicated by cystic degeneration of the left ovary, which had fallen into Douglas's cul-de-sac, and in which had developed an adeno-carcinoma as large as an orange, with carcinomatous infiltration of the pelvic

and abdominal glands. The ureters and pelves of the kidneys were dilated from pressure on the ureters, and the kidney tissue was pale and in an advanced stage of fatty degeneration. This case resulted fatally in seventy-two hours of septic peritonitis.

In the preparation for, the performance of, and the treatment after ovariectomy, Dr. Howard follows very closely the teaching of Keith. He uses carbolic acid solution for his instruments and sponges, and has the spray running throughout the operation, though not directed into the abdomen. He dresses the wound with dry iodoform gauze and absorbent cotton. He attaches great importance to the necessity of stopping all hemorrhage before closing the abdomen. He believes that the best way to control vomiting during anaesthesia is to have the stomach empty. He uses ether exclusively in prolonged operations, though beginning with chloroform.

After ovariectomy when trouble arises he draws favorable or unfavorable conclusions from the pulse rather than from the temperature. The paper relates an instance of reduction of temperature by the India-rubber coil from $104\frac{1}{2}^{\circ}$ to 100° in four hours, without retarding the fatal result.

DR. W. T. HOWARD, in speaking of this paper, referred to his own experience in ovariectomies. His earlier cases were all successful. The next four all died. In looking back over these, in the light of after experience, he does not think any of them could have been saved except possibly one. The cases just reported by Dr. O'Donovan were brought up because he had heard a report that the ovariectomies at the hospital were mostly fatal. Four out of the five, as it would be seen, had recovered. The fifth was hopeless in any case. After keeping the woman under observation for two weeks, and finding that she had increased by actual measurement two inches, he had operated only as a *dernier ressort*. The carcinomatous infiltration could not have been detected before the operation. The post-mortem revealed advanced Bright's disease of the kidneys. Albuminuria, however, is not of itself a contraindication for operating, as many recover who have albumen in the urine. The fourth case is interesting as occurring in so young a girl, and having been according to the history of such rapid growth. As dermoid cysts are generally congenital, it is probable that it had existed unnoticed for a long time.

He adopts Keith's rule—never to allow the woman any solid food for some time after the operation. Hot water and a little Scotch whiskey is all that Keith allows. It is Keith's plan never to tie an artery during operation, he just clamps the bleeding vessels until the operation is done. Neither does he use the spray, but in all other particulars he uses Listerism.

DR. JOSEPH T. SMITH asked whether the urine was examined in the fatal case before operation.

DR. W. T. HOWARD said that in the case in question it was omitted, but it is his custom to examine it.

DRS. JOHN S. LYNCH, BRANHAM, and J. T. SMITH spoke strongly during the discussion which followed, upon the great importance of examining the urine before any serious operation is performed, as the condition of the patient's kidneys will exercise a most important effect upon the recovery of the patient.

DR. F. DONALDSON, JR., said that in case of applicants for life insurance, good companies would pass

them even if albumen had been found in their urine, provided it was only temporary.

DR. W. T. HOWARD said that Bright's disease of itself is no contraindication for ovariectomy. Marion Sims had said to him only the last time but one that he saw him, "If we exclude cases of albuminuria from operation, we exclude many that will recover." It depends something upon the variety of the disease. Contracted granular kidney may last for years. Prof. Elliott, of New York, was strongly criticised for saying that all forms of casts are found in the urine of pregnant women, which disappear after recovery. But years after, he reiterated the statement, and said he had verified it. Prof. Howard had a case of puerperal eclampsia in consultation, where the urine was loaded with albumen. Barnes's dilators were used, delivery without laceration, and the woman recovered. The physical conditions which give rise to albuminuria in pregnancy are present in ovarian tumors, and the highest authorities on the subject unite in not considering it a contraindication. The real reason for examining the urine for albuminuria is not to see whether it be safe or otherwise to perform ovariectomy, but to see whether to use chloroform or ether. If there be albuminuria use chloroform, as ether may probably give rise to suppression of urine.

DR. BRANHAM read an interesting paper on

THE TREATMENT OF STRICTURE OF THE URETHRA.

He reported a number of cases and showed specimens. He prefers the internal to the external operation. Some of his conclusions were: 1. The nearer the meatus the greater the reflex symptoms. 2. Natural condition may give rise to symptoms. 3. These may exist elsewhere than at the meatus.

DR. CRISTOPHER JOHNSON read a paper that had been written by DR. DAVID STEWART, of Fort Penn, Del., who was absent, on

CARBON AS AN ANTISEPTIC.

Animal charcoal was used and carefully purified and used as a permanent surgical dressing for wounds. This he highly extolled.

DR. MORRIS said his old preceptor used a dressing of charcoal and sugar.

DR. TIFFANY said that he had seen the skin tattooed from the use of charcoal dressing.

DR. J. E. MICHAEL read a paper written by DR. W. S. MAXWELL, of Still Pond, Kent County, Md., on a case of

PERICOLITIS RESULTING FROM PERFORATION OF THE BOWEL

from the presence of a foreign body lodged there. The symptoms were obscure during life, at first simulating typhoid fever. The suffering became localized, and was very intense, though intermittent.

MISCELLANEOUS BUSINESS.

The Faculty then proceeded to the transaction of business, and listened to a number of reports; among the more interesting and important was a report by Dr. George Halstead Boyland on *Potent Drugs*. The Committee recommended the passage of a law forbidding the sale of potent drugs (opium, etc.) without the prescription of a legally qualified physician, under penalty

of fine, the law not to apply to wholesale dealers. The committee was continued.

DR. GEORGE H. ROHÉ, chairman of a committee appointed last year, reported recommending the profession to appoint a committee to report the most feasible means for the regulation of sanitary matters with a view to urging their passage upon the Legislature, if the Faculty approved of them. The committee was appointed.

DR. J. S. CONRAD, of committee to memorialize the Legislature on the passage of a law for the protection of the insane, reported that they had interviewed the Governor and prominent men, and the prospects for the passage of such a law were good. On motion of Dr. R. Winslow, it was decided to appoint a committee to memorialize the Legislature to pass a law regulating the practice of medicine in Maryland. The amendment to the constitution offered by Dr. J. E. Michael last year, to change the word "gentleman" to "person" in the article relating to applications for membership, was passed. The object of this was explained to be to allow a female practitioner to become a member if she were otherwise suitable.

The Nurses Directory Committee were not satisfied with their showing for the year. They were continued.

The following were elected

OFFICERS FOR THE ENSUING YEAR:

President.—Dr. John R. Quinan.

Vice-Presidents.—Dr. A. H. Bayly, Dr. J. E. Michael.

Secretary.—Dr. G. Lane Taneyhill.

Assistant Secretary.—Dr. Robert T. Wilson.

Reporting Secretary.—Dr. R. H. Thomas.

Treasurer.—Dr. W. F. A. Kemp.

CORRESPONDENCE.

THE PLYMOUTH EPIDEMIC.

To the Editor of THE MEDICAL NEWS.

SIR: The importance of the two subjects of the causation of extensive epidemics of typhoid fever, and of the possible contamination of drinking water, is such as to call for much care in drawing conclusions from facts of the kind presented in the interesting paper of Dr. L. H. Taylor on the fever epidemic at Plymouth, Pa., in THE MEDICAL NEWS of May 16th.

With much reluctance to appear to be in the minority in regard to such a topic, I beg leave to offer some reasons for hesitating to accept at once the judgment of Dr. Taylor, that the sole cause of the epidemic at Plymouth must have been the entrance into the mountain stream, chiefly supplying the town with water, of excreta from a patient suffering from typhoid fever between the third and fourth reservoirs above the town.

The essential facts are, in brief, these: After a visit in December to Philadelphia, the man returned in January to his house, situated forty feet from the bank of the stream, and there was attacked with typhoid fever. After two months of illness, by March 18th and 19th he was still not well, having hemorrhage from the bowels. His excreta were, during the illness, either thrown from the house to the ground, or emptied into a privy, where they remained on the surface of the ground. There was no drain from the house to the stream, and the ground is described as being, at least till the beginning of April, frozen and covered with snow.

We are, nevertheless, asked to believe that these excreta, lying for some two or three weeks upon snow and frozen ground, and then possibly washed by April showers into the stream, had enough specific virulence to account, alone, for a sudden outbreak involving more than a thousand cases of fever, with probably more than a hundred deaths. Is not this proving rather too much?

New cases are still occurring, although it is reported that the mountain stream "hydrant" water is now free from contamination. A principal reason given in Dr. Taylor's summary for his prefaced explanation of the epidemic is, that "it is well known that excreta from one typhoid patient have frequently poisoned the water supply of a whole neighborhood and caused an epidemic of such fever." What is certainly well known is that foul water, whether contaminated by typhoid excreta or otherwise, is a very frequent promotive, if not alone a sufficient cause, of the prevalence of typhoid fever. But it is also patent, that typhoid fever occurs often in the absence of any such cause; and it appears to be straining a point very far, on behalf of the theory of specific infection, to assert such a vitality in the "germs" of typhoid as will persist on frozen ground for weeks together and then develop at a distance so terribly destructive a power.

Along with the facts thus noticed, some others ought to be appreciated:

1. Water was pumped from the Susquehanna into the mains from March 20th to March 26th. Though said to be "reasonably pure," the quality of that water may be held to be, not without reason, open to grave suspicion.

2. There are "four successive reservoirs" through which, whether the stream be high or low, its water passes before it is supplied to the town. Its detention in these reservoirs must render it subject to injury in more than one way, which ought to be inquired into.

3. The town is said by Dr. Taylor to have suffered from "accumulated filth," although those living in its cleanest parts have also been among the subjects of the fever.

My purpose in mentioning these several unsanitary conditions is to suggest the view that they may all be factors in the causation of this unusually violent and extended epidemic. If the theory of *exclusively specific infection* or contagion be true, its evidence will withstand, and gain in the end by, the most searching examination of all that appears against it. To my view, the facts in the way of its final adoption are many and important; and it is useful for the public, as well as professional, interest, that such a case as that of the Plymouth epidemic should not be decided upon without a thorough, scientific, and what may be called judicial, investigation.

With great respect,

HENRY HARTSHORNE.

PHILADELPHIA, May 18, 1885.

NEWS ITEMS.

THE CHOLERA CONFERENCE AT BERLIN.—We learn from the *British Medical Journal* that the conference on cholera, which met last August, reassembled in Berlin on Monday, May 4th, to hear the result of recent experiments with the cholera bacilli which have been

made by Dr. Koch since the last meeting. Profs. Virchow, Bergmann, Leyden, Hirsch, Bardeleben, Drs. Skrzeczka, Kersandt, Pistor, Struck, Wolffhügel, Coler, Eulenberg, Fränkel, Gaffky, Neumann, and Schubert, who were present at the last meeting again attended, and in addition Profs. Pettenkofer, of Munich, and Günther, of Dresden, took part in the present meeting. Dr. Koch began by discussing and refuting the views of Finkler, Prior, Klein, and Emmerich. He demonstrated pure cultivations of comma-bacilli from France, Italy, and Germany; all these resembled one another. Of one hundred and fifty medical men who attended Dr. Koch's courses of practical instruction, one got "cholérine," and in his dejecta comma-bacilla were found. The pure cultivations from Germany, mentioned above, were obtained from this case. Dr. Koch considered that the cholera bacilli belonged exclusively to cholera, that they were easily distinguishable from other bacteria, and hence were serviceable as a diagnostic. He then proceeded to describe the successful experiments on guinea-pigs made with pure cultivation. His method of procedure was as follows. Five cubic centimetres (about eighty-five minims) of a five per cent. solution of soda were first administered; twenty minutes later, ten cubic centimetres (nearly three drachms) of meat infusion containing pure cultivations of the cholera bacilli were injected into the stomach. Immediately afterwards tincture of opium was injected into the abdominal cavity, and the animals were thus kept under the influence of the drug for about one hour, and then recovered, for the time, completely. Next day they became ill, and in from one to three days after the operation died. On post-mortem examination, the small intestine and cæcum were seen to be filled with a colorless alkaline flaky liquid, containing almost a pure cultivation of cholera bacilli. These experiments were successfully performed on eighty-five guinea-pigs. In the discussion which followed, Prof. Pettenkofer declared himself unconvinced; cholera, he held, produced conditions favorable to the development of the "comma-bacilli." Dr. Koch, in his reply, pointed out that his experiments had been attended by positive results. He added that the experiments would be continued. The discussion has not yet concluded.

THE AMERICAN CLIMATOLOGICAL ASSOCIATION will hold its second annual session at the hall of the Academy of Medicine, New York, on May 27th and 28th, under the presidency of Dr. A. L. Loomis. The following papers are announced to be read: "The Climate of Mexico," by H. D. Didama, M.D., of Syracuse; "Antiseptic Inhalations," by Beverly Robinson, M.D., of New York; "Catarrhal Affections of the Nasal Cavities as a Cause of Pulmonary Phthisis," by W. C. Jarvis, M.D., of New York; "The Home Treatment of Consumption," by F. C. Shattuck, M.D., of Boston; "Further Consideration of Pneumatic Differentiation, with Demonstration of the Pneumatic Cabinet," by H. F. Williams, M.D., of Brooklyn; "A Rule for the Even Disposition of Climate, based upon the Average of the Combined Atmospheric Humidities in the United States," by Ch. Dennison, M.D., of Denver, Col.; "Elements of Climate and their Relations to Pulmonary Consumption," by J. H. Tyndale, M.D., of New York; "Geographical Distribution of Phthisis in Michigan, with Sketch of

Topography," by E. L. Shurley, M.D., of Detroit; "The Treatment of Laryngeal Tuberculosis," by E. F. Ingalls, M.D., of Chicago; "The Problem of Acclimatization," by J. H. Platt, M.D., of Brooklyn; "Tampa Bay as a Health Resort," by J. C. Wilson, M.D., of Philadelphia; "The Results of the Home Treatment of Consumption Contrasted with those of Changed Residence and Climate," by E. D. Hudson, Jr., M.D., of New York; "Hay Fever and Allied Affections," by F. H. Bosworth, M.D., of New York; "The History of the Stethoscope, with the Presentation of a Modification of the Cammann Stethoscope," by D. M. Cammann, M.D., of New York.

INDIANA STATE MEDICAL SOCIETY.—At the annual meeting of this Society held last week the following officers were elected for the ensuing year:

President.—J. S. Gregg, M.D., of Fort Wayne.

Vice-President.—W. J. Hurt, M.D., of Waynetown.

Secretary.—E. S. Elder, M.D., of Indianapolis.

Assistant Secretary.—W. H. Lopp, M.D., of Columbus.

Treasurer.—G. W. H. Kemper, of Muncie.

PENNSYLVANIA STATE MEDICAL SOCIETY will hold its annual meeting this year at Scranton, on Wednesday next.

PUBLIC OPINION ON THE ACTION OF THE ASSOCIATION ON THE ORGANIZATION OF THE INTERNATIONAL MEDICAL CONGRESS.—Instead of tendering the Committee a vote of thanks, through Dr. Billings, the Association was, we will not say led, but stampeded into taking the extraordinary action recorded in the report of the proceedings of appointing a new Committee, consisting of one member from each State, to revise the work of the first Committee, on the absurd ground that the appointment of officers had not been governed by the principle of sectional and local representation. The principle in itself is a poor one applied to this subject; and, moreover, an examination of the list of names shows that all sections of the country are very fairly and worthily represented. It is surely more important that a man should be known to be familiar with the subject he is to direct than that he should come from any particular State, county, or city.

The lists of names of officers as now made out are good ones, and cannot easily be improved. The "ins" could be made "outs" and the "outs" "ins;" but that change, with very few exceptions, would only be an improvement to the extent of gratifying some disappointed aspirations for personal notoriety. One thing, however, can certainly be accomplished by the appointment of this new Committee of thirty-eight, namely, a serious delay of the preparations for making the Congress a success, and an infusion of doubt into the minds of the profession in Europe and Great Britain as to the wisdom of coming so far with such uncertainties.

It is reported that this Committee proposes to meet next September, probably in Cincinnati. It may be by that time they will be convinced of the propriety of passing a vote of thanks to the original Committee and adjourning, but even then sufficient mischief to the scheme of the Congress will have been done by the action of the American Medical Association at New Orleans.—*Boston Medical and Surgical Journal.*

We think that the American Medical Association has by this action stultified itself, and has betrayed an inherent weakness in its present plan of organization.—*Philadelphia Medical Times*.

The brethren of the Atlantic coast are unquestionably able to acquit themselves with credit in exalted positions, but there are those in the interoccean regions who deem themselves equally competent, and their right to a chance to display their competency cannot be violated with impunity. This is, practically, what the Association said, and steps were taken to redress the wrong which had been done.—*The Medical Age* (Detroit).

LUSK'S OBSTETRICS.—We are pleased to learn that the last American edition of Prof. Lusk's work on Obstetrics and Diseases of Women and Children has been translated into French by Dr. Doleris, with a preface by Prof. Pajot.

PRIZE AWARDED.—A cablegram announces that the French Academy of Medicine has awarded a prize to Dr. Murrell, of Westminster Hospital, London, for his discovery that nitro-glycerine is a remedy for angina pectoris.

DR. ROBERT KOCH has been gazetted as Professor of Hygiene in the University of Berlin, and has been appointed "Geheimer Medicinalrath."

THE DEATH OF PROFESSOR PANUM.—We regret to have to record the sudden death, on May 3d, of Dr. P. A. Panum, the eminent Professor of Physiology in the University of Copenhagen, and the President of the last International Medical Congress. Professor Panum's work was largely in the field of medical and physiological science, and in his death the profession sustains a severe loss.

DR. FERRÁN.—The Madrid correspondent of a daily paper gives the following particulars of Dr. Ferrán, whose astounding researches on cholera have been received with such enthusiasm in Spain and with so much suspicion elsewhere: "Dr. Jaime Ferrán is only 33 years of age, and after passing through the customary curriculum at the Institutes of Tortosa and Tarragona, took his M.D. degree at Barcelona. He has been in practice at Tortosa for several years, and is already well-known for his work on micro-telephony in 1878, and for his curious investigations on micro-biology and parasites, which were rewarded by the Royal Academy of Medicine in Madrid. Dr. Ferrán was sent to Toulon and Marseilles during the last epidemic of 1884, and he spent several months with German, French, and Italian surgeons, studying the epidemic, and especially Dr. Koch's comma-bacillus. Those studies impelled Dr. Ferrán to pursue his investigation, on his return to his own country, and he thus came to the conclusion that Dr. Koch had only observed one of the many stages of this microbe's successive developments. Senor Ferrán has discovered that, by submitting the comma-bacillus to certain chemical elements very similar to the bile of animals and to the gastric juice of the human stomach this microbe passes through successive and invariable stages of development, in one of which he has detected

the eggs, which are, in his opinion, the real generators and propagators of cholera."

OBITUARY RECORD.—Died in Stewart, Lee Co., Ill., May 10th, of mesenteric tuberculosis, WILLIAM SLADE HERRICK, M.D. Dr. Herrick was born in West Randolph, Vt., on May 3, 1838, and graduated in Arts at Dartmouth College in 1860, and in medicine at Rush Medical College, of Chicago, in 1866. He studied medicine under Dr. E. P. Cook, of Mendota, Ill., and served as surgeon-steward on the United States Gunboat Gen. Bragg, of the Mississippi squadron for two years during the civil war. He was a brother of Dr. S. S. Herrick, of New Orleans, Secretary of the Louisiana Board of Health.

NOTES AND QUERIES.

PUMP-WELLS IN BROOKLYN.

To the Editor of THE MEDICAL NEWS.

SIR: In your issue of to-day, you say that one hundred pump-wells still exist in this city; please correct this, as all these have been filled; there remains but *one well* in Brooklyn, and that furnishes pure water. This city is supplied entirely with Ridgewood water which, as you will see by the report of July 20, 1881, of the analysis of Prof. Leeds, of Stevens Institute, stands A No. 1.

Respectfully,
J. H. RAYMOND, Commissioner,
Department of Health.

BROOKLYN, N. Y., May 16, 1885.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM MAY 12 TO MAY 18, 1885.

VOLLUM, EDWARD P., *Lieutenant-Colonel and Surgeon*.—Granted leave of absence for three months, to take effect when his services can be spared by his Department Commander.—S. O. 110, A. G. O., May 14, 1885.

A Board of Medical Officers, to consist of A. K. SMITH, *Lieutenant-Colonel and Surgeon*, J. C. G. HAPPERSETT, *Major and Surgeon*, JAMES P. KIMBALL, *Captain and Assistant Surgeon*, appointed to assemble at the United States Military Academy, West Point, New York, on June 1, 1885, to examine into the physical qualifications of the members of the graduating class and the candidates for admission to the Academy.—S. O. 106, A. G. O., May 9, 1885.

CORSON, JOSEPH K., *Captain and Assistant Surgeon*.—Leave of absence extended ten days.—S. O. 109, A. G. O., May 13, 1885.

KANE, JOHN J., *Captain and Assistant Surgeon*.—Leave of absence for seven days extended one month.—S. O. 109, A. G. O., May 13, 1885.

CARTER, E. C., *First Lieutenant and Assistant Surgeon*.—Leave of absence extended one month.—S. O. 106, A. G. O., May 9, 1885.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE UNITED STATES MARINE-HOSPITAL SERVICE, FOR THE WEEK ENDING MAY 16, 1885.

FESSENDEN, C. S. D., *Surgeon*.—Granted leave of absence for thirty days, May 12, 1885.

GOLDSBOROUGH, C. B., *Passed Assistant Surgeon*.—To proceed to Moss Point, Miss., for special duty, May 16, 1885.

THE MEDICAL NEWS will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS should be addressed to No. 1004 Walnut Street, Philadelphia.